

The Ryedale Historian

No. 12

1984



Malton Friends' Meeting House (1823) and burial ground.

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EDITORIAL

First and foremost, a vote of thanks to two bodies which have generously subsidised this publication. No grant was forthcoming from the County Council for No. 11, but the shortfall was made good by the North York Moors National Park, to which we express our gratitude. And a double 'thankyou' to the Council for British Archaeology, which contributed a grant towards the report on West Newton Grange in No. 11 (too late for acknowledgement to appear in that number), and has repeated the gesture, even more generously, in respect of the article in this issue by Professor J.E. Hemingway and Raymond Hayes.

Such financial help is always welcome, especially in hard times. But it is an equally pleasant surprise to receive, out of the blue, a contribution in the form of an article, from Hertfordshire. Family history research is a thriving industry, and we are delighted that Mrs. Jean Davis should offer us her study of two families of Ryedale Quakers, especially as it is an area that has been rather neglected, both in the History of Helmsley and in subsequent Ryedale Historians.

Dr. D.A. Spratt's name recurs in this number, as contributor, reviewer and reviewed. It seems deplorable, indeed, that he should rank as a new contributor to our pages, and we hope to hear more from him in future. Quite possibly not every reader will be persuaded by his and Mr. Drummond's interpretation of the extraordinary complex of dykes at Cockmoor Hall, but they make a strong case, and further discussion will always be welcome.

Some doubts may also arise in readers' minds as to the methodology behind William Hamilton Dalrymple's population study of the Helmsley area; indeed, he freely admits the limitations himself. But it is nevertheless a valuable experiment in the use of statistical techniques still unfamiliar to many traditional local historians. It is also welcome as a further contribution from the younger generation (readers will recall the 14 year-old William's study of the Great Cross at Stonegrave in No. 10), and its origins as an 'A Level' geography project provide adequate academic justification. William is shortly off to Cambridge to read archaeology.

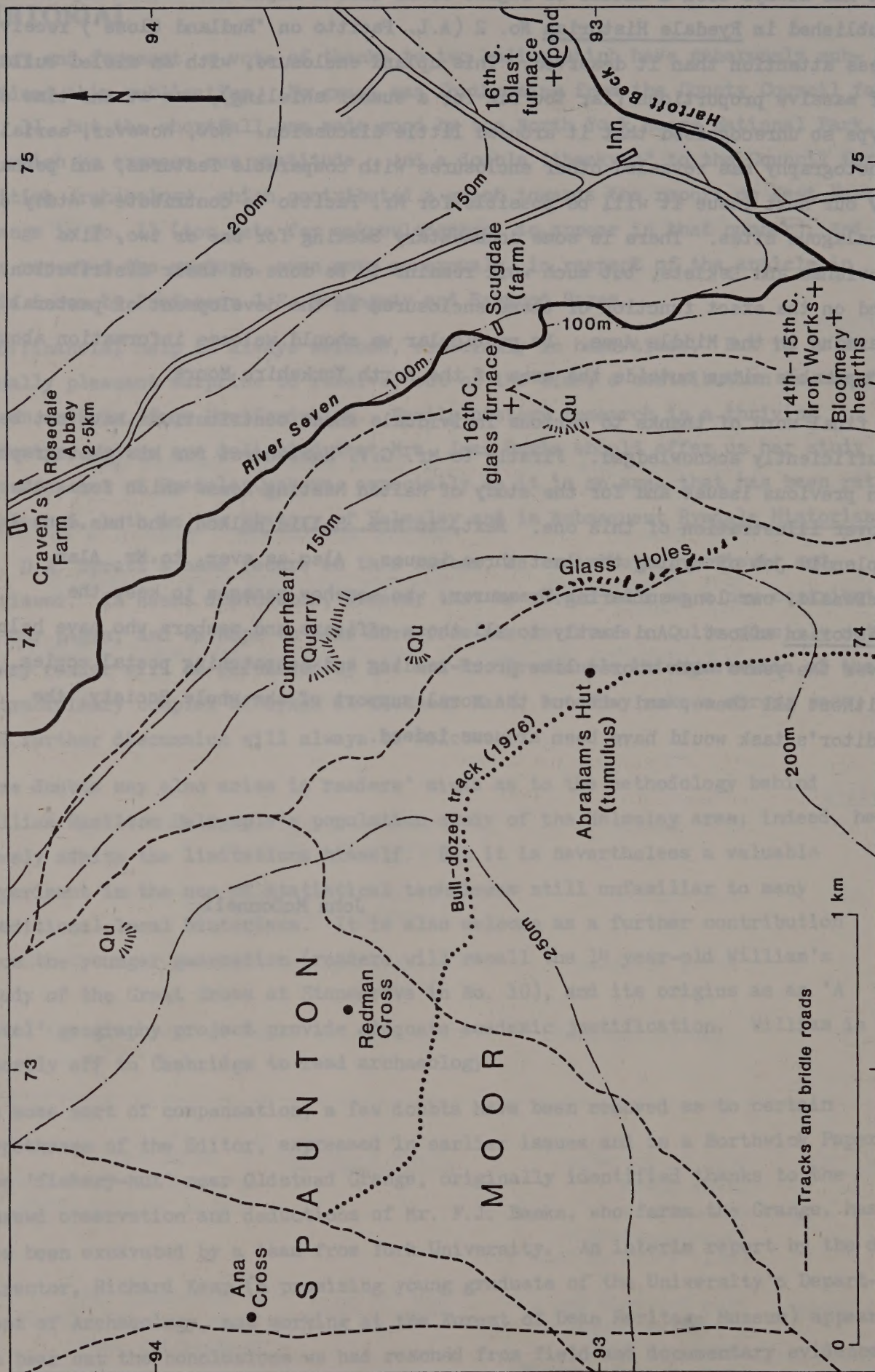
As some sort of compensation, a few doubts have been removed as to certain hypotheses of the Editor, expressed in earlier issues and in a Borthwick Paper. The 'fishery-hut' near Oldstead Grange, originally identified thanks to the shrewd observation and deductions of Mr. F.J. Banks, who farms the Grange, has now been excavated by a team from York University. An interim report by the dig director, Richard Kemp (a promising young graduate of the University's Department of Archaeology, now working at the Forest of Dean Heritage Museum) appears to bear out the conclusions we had reached from field and documentary evidence.

It has always been a matter of regret to us that a major excavation report published in Ryedale Historian No. 2 (A.L. Pacitto on 'Rudland Close') received less attention than it deserved. This upland enclosure, with an aisled building of massive proportions (far too big for a summer shieling), was at the time of a type so unrecognised that it aroused little discussion. Now, however, aerial photography has revealed other enclosures with comparable features, and perhaps by our next issue it will be possible for Mr. Pacitto to contribute a study of analagous sites. There is some documentary backing for one or two, like Levisham and Esklets, but much work remains to be done on their distribution, and on the exact function of these enclosures in the development of pastoral farming in the Middle Ages. In particular we should welcome information about comparable sites outside the area of the North Yorkshire Moors.

A final word of thanks to various individuals whose contributions have not been sufficiently acknowledged. Firstly to Mr. G.V. Hazlehurst for his photographs in previous issues and for the study of Malton Meeting House which forms the cover illustration of this one. Next, to Mrs. Sallie Halkon, who has done a splendid job of typing the last three issues. Also as ever, to Mr. Alan McDonald, our long-suffering Treasurer, who somehow manages to keep the Historian afloat. And lastly to all those officers and members who have helped over the years with chores like proof-reading and despatching postal copies. Without all these, and without the moral support of the whole Society, the Editor's task would have been arduous indeed.

John McDonnell

THE GLASS HOLES OF SPAUNTON MOOR



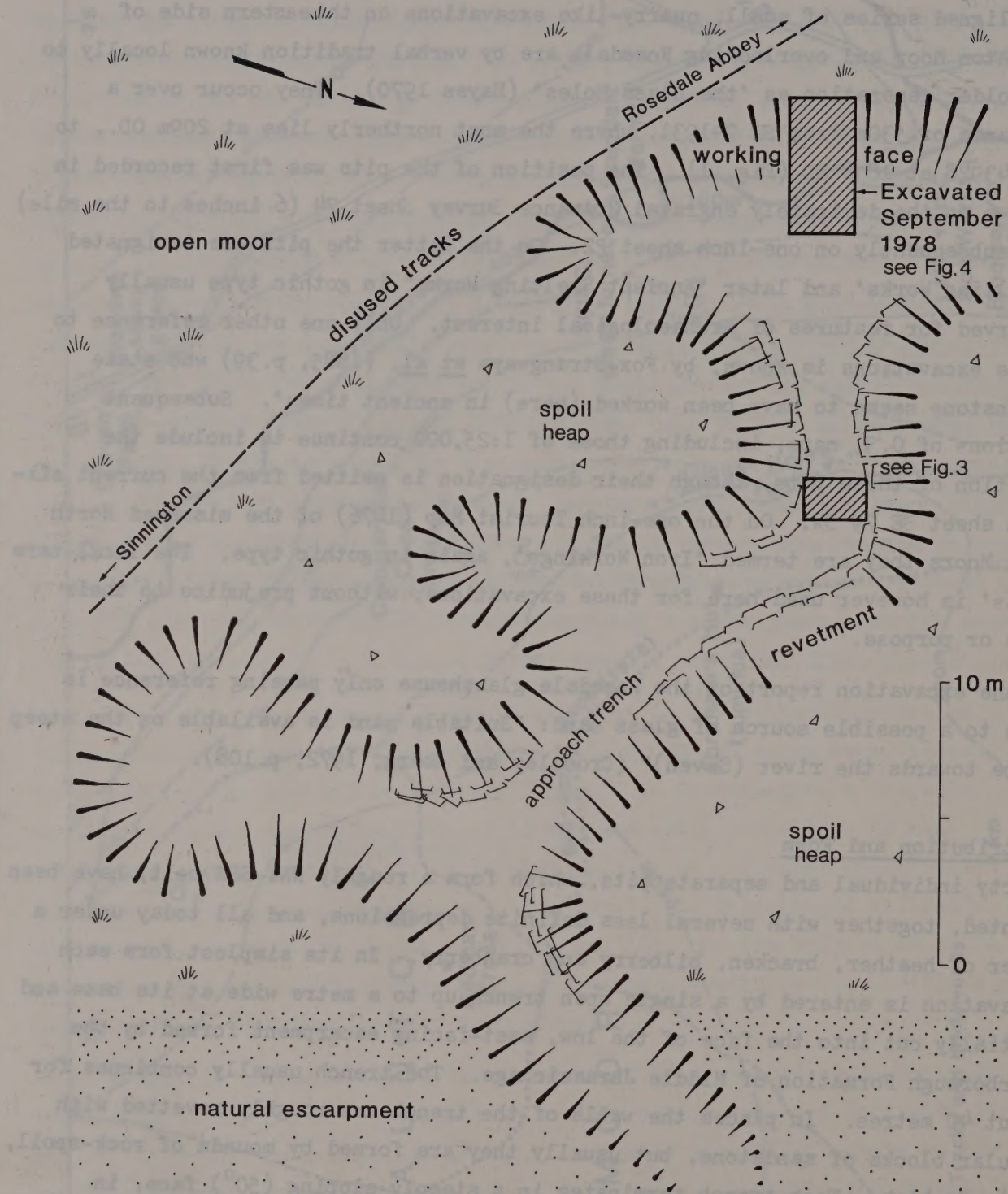
THE GLASS HOLES OF SPAUNTON MOOR

An aligned series of small, quarry-like excavations on the eastern side of Spaunton Moor and overlooking Rosedale are by verbal tradition known locally to the older generation as 'the Glass Holes' (Hayes 1970). They occur over a distance of 530m from SE 741931, where the most northerly lies at 209m OD., to SE 743926 at 183m OD (Fig. 1). The position of the pits was first recorded in 1853-6 on the delicately engraved Ordnance Survey Sheet 74 (6 inches to the mile) and subsequently on one-inch sheet 22. On the latter the pits are designated 'Smelting Works' and later 'Ancient Smelting Works' in gothic type usually reserved for features of archaeological interest. Only one other reference to these excavations is known, by Fox-Strangways *et al.* (1885, p.39) who state 'ironstone seems to have been worked (here) in ancient times'. Subsequent editions of O.S. maps, including those of 1:25,000 continue to include the location of these pits, though their designation is omitted from the current six-inch sheet SE 79 SW. On the one-inch Tourist Map (1976) of the misnamed North York Moors they are termed 'Iron Workings', again in gothic type. The local term 'pits' is however used here for these excavations, without prejudice to their form or purpose.

In the excavation report on the Rosedale glasshouse only passing reference is made to a possible source of glass sand: "Suitable sand is available on the steep slope towards the river (Seven)" (Crossley and Aberg, 1972, p.108).

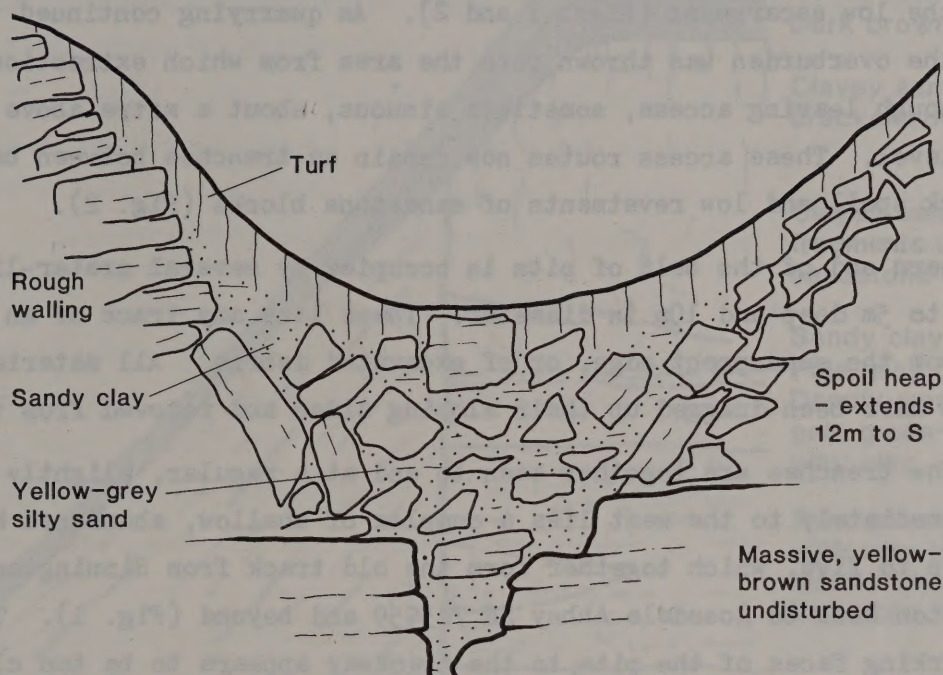
Distribution and Form

Thirty individual and separate pits, which form a roughly NNW-SSE belt, have been counted, together with several less definite depressions, and all today under a cover of heather, bracken, bilberry and cranberry. In its simplest form each excavation is entered by a single open trench up to a metre wide at its base and initially cut into the face of the low, east-facing escarpment formed by the Scarborough Formation of Middle Jurassic age. The trench usually continues for about 40 metres. In places the walls of the trench are roughly revetted with angular blocks of sandstone, but usually they are formed by mounds of rock-spoil, up to 3m high. Each trench terminates in a steeply sloping (50°) face, in current height 3-4m above the trench floor; this is regarded as the final working face before the pit was abandoned. Small lateral depressions at the ends of the trenches may mark additional access routes to the working faces. Other and fewer, less simple trenches show diversions from a straight line and suggest that two working faces may have shared a common exit trench (Fig. 2). The present floors



a

S

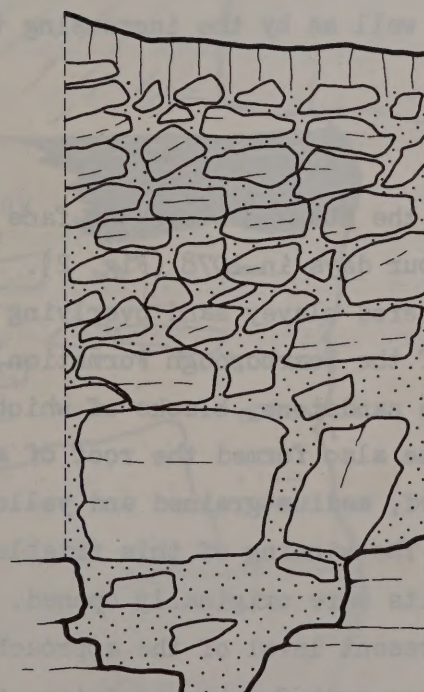


b

Turf and peaty humus

Rough walling

Undisturbed sandstone



2m
1
0

of the approach trenches are formed of rock debris and sand about a metre thick, resting on massive undisturbed sandstone (Fig. 3a). No trace of paving or a constructed track of broken stone has been found in the floor of the trenches, as may be expected if the products of the pits had been removed by barrow or sled.

It would appear that each pit was worked as an open excavation, initially at the edge of the low escarpment (Figs. 1 and 2). As quarrying continued the waste rock of the overburden was thrown into the area from which extraction had taken place, though leaving access, sometimes sinuous, about a metre above the original working level. These access routes now remain as trenches between banks of overgrown rock spoil and low revetments of sandstone blocks (Fig. 2).

The northern end of the belt of pits is occupied by several crater-like excavations up to 5m deep and 10m in diameter. These lack any trace of an approach trench from the escarpment edge, or of excavated debris. All material from such pits must have been dragged up their sloping sides and removed from the site.

In plan the trenches are together seen to end at a regular, slightly sinuous line. Immediately to the west lies a complex of shallow, abandoned hollow ways, usually up to five, which together form the old track from Sinnington SE 745857 via Spaunton Moor to Rosedale Abbey SE 725959 and beyond (Fig. 1). The relation of the working faces of the pits to the trackway appears to be too close to be fortuitous. They do not impinge one upon the other and it may best be concluded that the westward extension of the pits was restricted by the position of the long-established trackway, as well as by the increasing thickness of the overburden.

Excavation of Pit 22

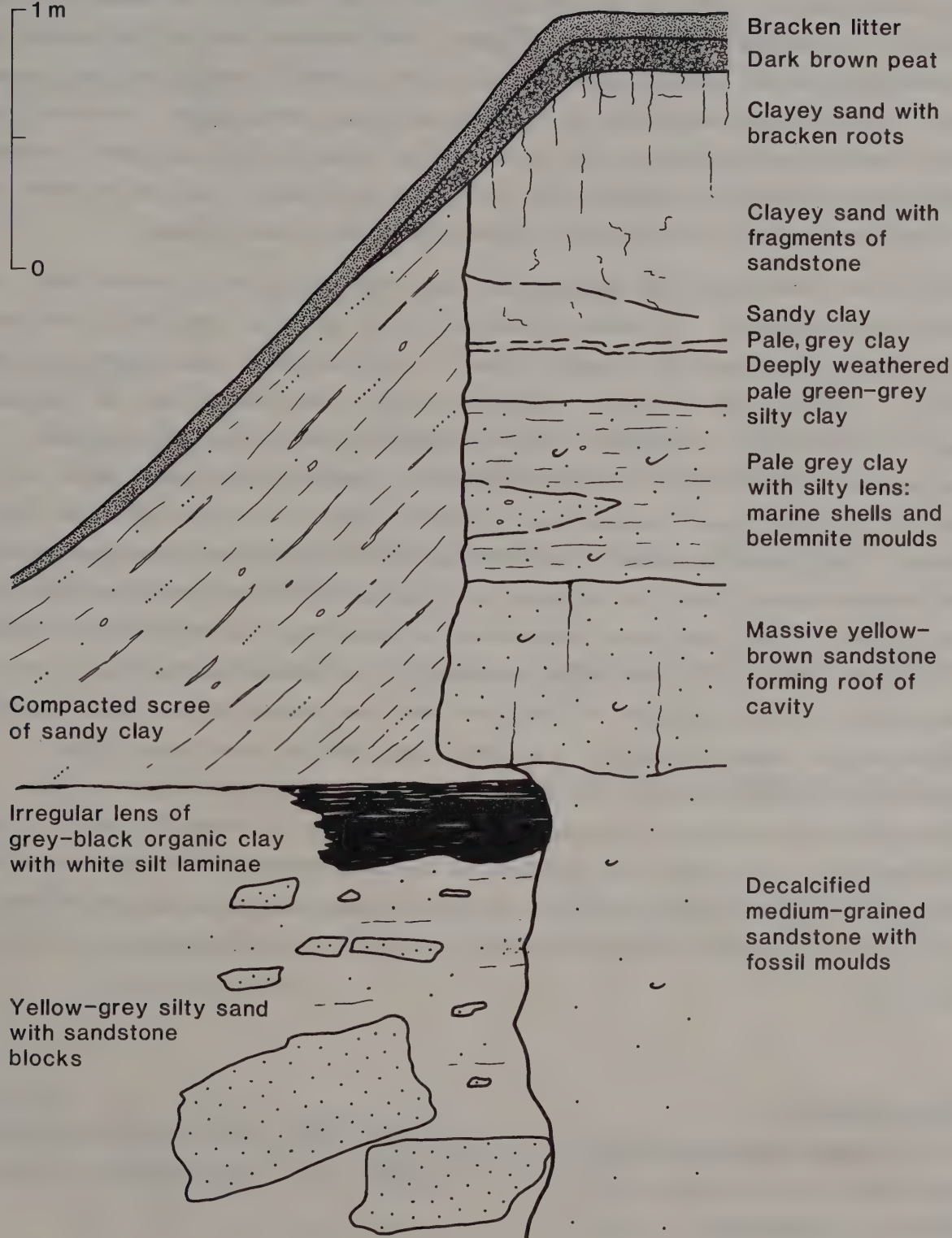
An excavation was opened into the abandoned working face of one pit, No. 22 from the north, over a period of four days in 1978 (Fig. 2). It proved, beneath a layer of fibrous peat, a weathered clayey sand overlying a succession of marine sandstones and shales (part of the Scarborough Formation), and dominated by a massive and tough yellow-brown sandstone, blocks of which form much of the spoil heaps (Fig. 4). This sandstone also formed the roof of a recess and cavity which overhung a friable, decalcified, medium-grained and yellowish sandstone, proved to 3 metres, but unbottomed. The winning of this friable sandstone was clearly the purpose for which these pits were originally opened. At pit 22 the recess and cavity extend below the present level of the approach trench and it is therefore not possible to estimate how much friable sandstone has been removed from the pit or from the Glass Holes as a whole. Without doubt it must total many thousands of tons. No trace of ironstone or limestone was found on the site: furthermore there was no evidence of any calcination area or working place or

E

W

1 m

0



abandoned tools of any kind. At the foot of the low escarpment, however, several scattered circular wasters of coarse sandstone to 50cms diameter may indicate the source of grindstones used in the sharpening of quarry tools.

The friable sandstone readily falls, on drying and very light crushing, to a yellowish sand of uniform texture. The only likely use of such quantities is in the making of glass, as is implied by the local name of the site, the Glass Holes. The Rosedale glass furnace (Hayes 1970) lies only a half kilometre downslope from the pits at approximately 120m OD and it would therefore appear that this sand was used there in the production of green glass. No specific track leads from the pits to the glass works, though an old and partly sunken track which appears to pre-date the pits runs north-east from the southern end of the Glass Holes in the general direction of the glass furnace.

The date of working of the sandpits has not been specifically determined. No finds were detected. The working face of pit 22 is today completely obscured by a steeply inclined and layered scree of well-compacted sandy clay and sand, below a fibrous peat (Fig. 4). Furthermore this overlies in part an irregular lens of grey-black carbonaceous clay or clayey organic mud, with delicate laminations of white silt. Such small ponded deposits frequently occur at the foot of working places in abandoned quarries: taken in conjunction with the scree a long phase of natural, slow accumulation of rock and plant debris after the abandonment of the pits is therefore implied. This is consistent with the excavation of the Glass Holes as a source of sand for the Rosedale glass works, which were probably in production between 1580 and 1615 (Hayes 1970). The reason why the exploitation of the glass sand was from a series of adjacent but separate pits rather than from a single, long working face is not clear, although the possibility of the sand being worked to serve additional and independent glass houses elsewhere in the region may be borne in mind. In any circumstance, the initial recognition of the occurrence of the friable sand along the escarpment edge and beneath a substantial plant cover is an indication of the detailed and long-continued search, in the past, for materials of economic potential.

Acknowledgements

Our warmest thanks are given to Mr. G. Wardle Darley, Lord of the Manor, for permission to excavate, and to Mr. W.R. Goodall, Mr. J. Allison and Dr. D. Spratt for assistance in the field.

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- Hayes, R.H. 1970. 'The Glasshouse at Scugdale, (Rosedale West)'. Ryedale Historian, 5, 26-35.

FIGURE CAPTIONS

- Fig. 1 Locality map of part of Spaunton Moor showing the Glass Holes, the Rosedale glass furnace and adjacent medieval industrial sites.
- Fig. 2 Plan of pit 22, Glass Holes, Spaunton Moor SE, showing positions of excavated sections.
- Fig. 3a N-S section across the part-filled approach trench 10m E of working face in pit 22.
- Fig. 3b Section of north face of approach trench 10m E of working face in pit 22.
- Fig 4 Excavated working face of pit 22, SE 742929, in the Scarborough Formation, showing the position of the decalcified sandstone used for glass-making.

Captions

- Figure 1 Dykes in the Scamridge area.
- Figure 2 Plan of Cockmoor Dykes (based on 1:2500 Ordnance Survey).

HEBDENS AND FLOWERS: QUAKERS OF RYEDALE

The road from Malton to Hovingham, now the B1257, runs westwards under the lee of the Howardian Hills. To the north, the ground falls away into Ryedale: wet land scribbled over with streams and becks, and divided again later with straight dykes and ditches. Along its eight-mile length the road is punctuated by small settlements - Broughton, Swinton, Amotherby, Appleton le Street, Barton le Street, Slingsby, Fryton and Wath - and their names underline the importance of the road throughout history.

The Romans left the legacy of a paved road - le Street. The Anglo Saxons settled at places such as Barton, Swinton, Appleton. And the Scandinavians gave their farmsteads names ending in the suffix "-by", crossed their rivers at a "wath" and used the word "holme" to denote a small island rising from wet land. Such a place is South Holme, due north of Slingsby, and it was at Fersit House in South Holme that Roger Hebden created a Quaker meeting and burial ground in 1652 which was to remain in use for at least 125 years.

In 1652 the Hebdens were already well established along the valley. By the last quarter of the sixteenth century, Thomas Hebden, grandson of one John Hebden of Amotherby, lived at Appleton; whilst his brothers Christopher and John lived at Swinton. In 1632, William Hebden, son of the last-named John, bought the lordship of the manor of Appleton le Street. This branch of the family retained the manor, with which descended that of Easthorpe, until 1759, at which time they alienated Appleton manor and stayed at Easthorpe Park. Meanwhile William's cousin John, the son of Thomas, was also bringing up a family at Appleton le Street. It included sons Robert and Christopher, who were born in 1614 and 1617 respectively, and about 1621 another son, Roger, was born, though the entry does not appear in the Bishop's Transcripts for the period, which are incomplete.

By the year 1651, "in or about the last month ... and in the 31st year of my Life ...", Roger Hebden was a woollen draper and tailor in New Malton, a man of some substance. His way of life was then suddenly and dramatically changed by the arrival of George Fox who, as a young man of 27, was making the first of his journeys north to Yorkshire, preaching and holding meetings in private houses and barns, or in the open air. The nick-name "Quaker", by which he and his followers were to become known, is said to have originated the previous year when, charged at Derby with blasphemy, Fox had bidden the magistrates to "tremble at the word of the Lord".

From the age of eleven or twelve, Roger Hebden had been unusually attracted by religious matters and when, in Isaac Lindley's words, "it was the good Pleasure of God to send amongst us ... his faithful servant George Fox, who was indued with Power from on High, to turn men from Darkness to Light", (1) Hebden recognised in Fox the leader for whom he had been seeking.

It was probably at just this time that he, with his brothers Robert and Christopher, bought Fersit House at South Holme. Private records show the date of its purchase from William and Leonard Weddell as 29th March, 1631, which is obviously a transcription error since the oldest of the three brothers would have been only seventeen at that time, and 1651 is the likely year. It is not clear whether Robert and Christopher knew of the use to which the property was to be put by Roger Hebden, but certainly it was early in 1652 that meetings began to be held at South Holme. "And the better to follow truth's Service, he turned over his House and Shop at Malton to a Friend, and gave over trading, and went to live of his own Land: for he had an Estate of his own, and served truth at his own Charge; and as he had freely received, he freely ministered of the Gospel of Life and Peace, and settled meetings and did good service for the Lord and his People." (2)

Roger Hebden was probably typical of many of the early Friends who, according to William Penn, were men "of good capacity, substance and account among men." (3) Others who were converted with him were Christopher Halliday and William Pearson (4), whilst his decision to abandon his Malton drapery business was influenced by John Whitehead and Richard Farnsworth. (5)

One account of his activities refers to a meeting of a hundred people taking place at Fersit House every night; another says that two hundred people gathered there for days together. W.C. Braithwaite in the "Beginnings of Quakerism" gives a somewhat extreme view when he says that "Upon Roger Hebden was poured out the spirit of prayer and prophecy, and a great work of the Lord took place which recalls on a small scale the autos da fe by which luxurious Florence paid homage to the holy zeal of Savonarola." The men of Malton "with we opine the sturdy woollen draper at their head" burnt their ribbons and silks and fine commodities "because they might be abased by pride." (6) There is a fine modern painting by Geoffrey Makins of "The Burning of the Ribbons" in Malton market place, which includes the figure of Roger Hebden; this picture now hangs in a Malton Meeting House of the Society of Friends in Greengate.

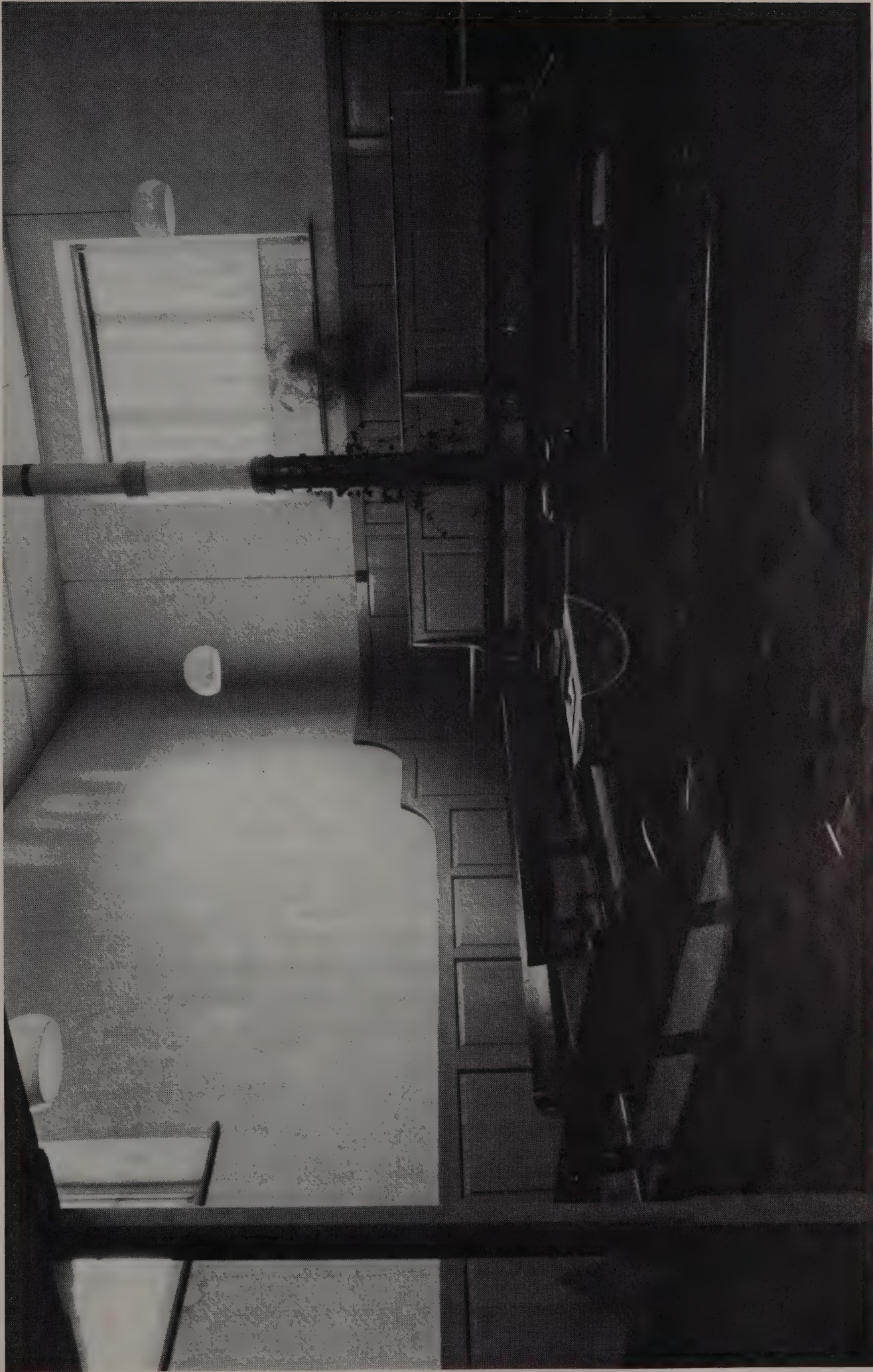
The position of the Quakers during the Civil War was somewhat ambivalent. Although the Commonwealth administration was directly opposed to high church practice, and incumbents throughout the country had been replaced by non-sectarian clerks, some of the early Quakers, by the extremity of their views

and the violence of their behaviour, roused a great antagonism among large sections of the community and more particularly among the justices before whom they were brought on charges of heresy and sedition. Unlike other non-conformists, such as Baptists, the Friends followed their predecessors the Seekers in not only objecting to the form of service and practices of the Anglican churchmen, who could "like so many weathercocks turn around, a rout of temporisers, ready to embrace all that is or shall be proposed, in the hope of preferment" (7) but by actually believing the church itself to be no longer the church of God which had "fled into the wilderness and the Dragon and the Beast were worshipped."

In December, 1654, Roger Hebden was waiting to speak at a friend's house in Newton near Tadcaster, when "I was stirred in Spirit to go to the World's People's Meeting-place, in that Town, where they Worship an unknown God ...". For the words he spoke there he was sent to York Castle for a month before being tried at the Wetherby Sessions. His audience in Newton church may have found him an uncomfortable witness, for "the Word of the Lord unto me before I went was, Tell them of their Sins: And so to every one, as they came before me, as I was moved of the Lord, I declared unto them their Condition ... as Thou art a Hireling and a dumb Dog etc. and the like ...".

At the Sessions he continued to provoke the Justices and was sent back to York Castle for an indefinite period. From the gaol he wrote a letter to George Fox the manuscript of which is at Friends' House. He also sent letters of encouragement to his Friends in the Truth; of warning to "those called Justices" at several Sessions in Yorkshire; of reprimand to a Friend for an unworthy action; of advice to Friends upon the putting forth of a Proclamation by O. Cromwell; of persuasion to his brother John, apparently attempting to conclude a conversion; and of censure to Enoch Sinclare, the "Parish-Teacher" of Slingsby. His message was stated in a letter to be read to Friends in East and North Yorkshire: "... deal Plainly, Simply and Honestly one with another, in what you see or hear that is amiss; and none to be Rash or Hasty in Reproving, but let all things that are done amongst you, be done in Meekness and Love and then you will be a People amongst whom the Lord will delight to dwell, who is a God of Love."

The punishments meted out to the Quakers were frequent and heavy, and were said to include flogging, starvation and other forms of torture, recorded in their books of Sufferings as evidence of the "Murdering Spirit of the World" and of the need for a return to conduct recommended in the Bible. Although Roger Hebden was held prisoner at York for thirty or forty weeks, however, he himself makes no mention then, or on any subsequent visit, of any ill-treatment and he



Inside the Kirkbymoorside Meeting House. The present building is late eighteenth century, but Friends have met on this site since 1669, and the interior layout has probably changed little from those early

was allowed on several occasions to visit Friends in the neighbourhood. In September, 1655, he was again brought to court and cleared by verdict of a jury. Some suggested that he might claim damages for wrongful imprisonment, and he was not actually released until 12th November. That year the Publishers of Truth organised a mission to spread their religion further south, and set off in small groups of two or three to preach wherever they could find an audience. Their reception was often stormy, but they gathered new Friends as they went. "He (Hebden) was very loving and tender hearted to such as were under spiritual Exercise, and seeking after the Lord; and the Lord blessed his Labour and service in the truth, and he did turn many to Righteousness." (8)

By March 4th, 1657, he was in Aylesbury gaol for causing a disturbance at the "Steeple-House" at Newport Pagnall, kept a few days and then tried at Sessions, after which he spent a fortnight in the House of Correction. The following October he was back at York Castle to await an appearance before Cromwell at Westminster: nine weeks of imprisonment followed for not paying tithes. In the early summer of 1658 he had travelled to London and then, with Samuel Watson, went north into Scotland "about that time when King Charles II came into England again", strengthening Friends "for to stand in the day of Tryal, then approaching". They were unharmed, however, and returned to Yorkshire via Cumberland, deploring that it "was a time of much Wickedness and Lewdness, much of God's good Creatures consumed in Drinking and Fires making, Ringing and Rejoycing, because of the coming of the King."

In November, 1658, he married Lucy Davidson, the daughter of Robert Davidson of Newton, another Friend, "... a tender-hearted woman, in whom he was comforted all his days: she was indowed with Riches of Mind, above the most of her sex, one that was acquainted to do and to suffer for the truth's sake". She was probably a well-educated woman, for she wrote in a very elegant style. Only one son, Isaac, is recorded as a result of the marriage, the place and date of his birth being unknown.

The period between the Restoration in 1660 and the eventual passing of the Toleration Act in 1689 proved to be the bloodiest and most violent that the Friends experienced. The Anglican Church, reinstated by Charles II, demanded that dissenters of any denomination should be suppressed. Hebden was convicted once more, this time for refusal to take the Oath of Allegiance, another frequent cause of conflict. Back he went to York Castle, where between four and five hundred were confined for three months or more. Moreover, in 1664 the Conventicle Act was passed, which made it illegal for any religious meeting of five or more persons to take place, except within the authorised church. By July the penalty for the third offence of this kind was a fine of £100 or

banishment into "some of the King's Foreign Plantation", these punishments applying also to the owners of meeting houses and grounds. On the first day of the following week, a gathering of over a hundred at South Holme took place uneventfully. However, by August 8th he was arrested while conducting a meeting at Sheriff Hutton and committed with the owner of the house, John Hicks, to York Castle for a further three months, followed by a similar period in 1665.

"The Cruelties of Men were much seen in Persuing this Act, in several parts of the Nation, especially in and about London, Sentencing many for Banishment and banishing some; but they were much restrained of what might be intended; for that Summer, that many might have been sent away, there was Wars by Sea, and the Pestilence very hot about London, which I believe did, as the Lord saw it good, put a great stop to them in sending many away who were sentenced for Banishment; although many of our dear Friends in that common calamity the Lord took away ..."

From this time on, fewer details of Roger Hebden's life are recorded, although in 1671 some of his goods to the value of £21 15s were distrained as a result of his preaching at Richard Skipton's house in 'Glassdale'. (9) He continued to write and send letters of advice to local meetings. "An Exhortation to Friends concerned in Merchandise" was brought to the Yorkshire Quarterly Meeting in 1676, followed by another in March, 1677, giving "A Warning from the Lord". His work at Fersit House continued, and in 1684 beasts and sheep were taken worth £26 13s 4d, out of a total of £73 9s 10d distrains imposed after a meeting at South Holme.

At the age of 75 or thereabouts, Roger Hebden died. "I lived near him," wrote Isaac Lindley of Wildon Grange, "and was well acquainted with him, and knew him a good companion in the work and labour of the Gospel, in which service we travelled many years and miles together, and were mightily comforted in the Lord and in one another. To conclude, he was a serviceable man in his day, and went to Meetings, when he was able to minister very little, by reason of his great weakness; and exhorted to the love of Righteousness when natural strength had well nigh failed; and is now taken from us, to enjoy the Reward of such as are blessed". (10) His name is included among those of the Valiant Sixty, and as one of the First Publishers of Truth.

In 1700 was published "A Plain Account of the certain Christian Experiences, Labours, Services and Sufferings of that Ancient Servant and Minister of Christ, Roger Hebden, deceased; containing both Warning, Consolation, and Instruction in Righteousness". It was printed and sold by T. Sowle in White-Hart-Court in Gracious Street, London. Before such publication could take place, however, the Yorkshire Quarterly Meeting Minutes chart its progress. (11) In December, 1696, it was decided that the book, having been submitted, should be perused by

Thomas Aldam and then further examined by a committee of six; and it was not until the following September that the manuscript was carried to London by Samuel Skelton for further perusal. In March, 1699, the work was ordered to be corrected and transcribed with wide lines for printing, and three months later a copy was ordered to be sent to each Monthly Meeting. Literally speaking this means a printed edition limited to only fourteen copies, of which at least two are now at the Friends' Meeting House in Euston Road. (The author of this article, who has in her possession various family documents relating to the Hebden family, would be delighted to acquire one of the other twelve copies, if the whereabouts of any one of them is known.)

There is no record that Roger Hebden's son Isaac followed him into the ministry of the Friends, but he inherited Fersit House in 1676 during his father's lifetime and held it for sixty years, representing the Malton Meeting at the York Quarterly Meeting in 1719. (12) He married Frances Clarkson, the daughter of another Friend, at Fersit House, and they had a family of eleven, few of whom survived infancy. When he died in 1740, Isaac Hebden of Holme was buried "in his own burying place".

Only two of his children seem to have outlived him - John, then aged 53, who apparently never married, and Edith aged 40. Like her grandfather, she became a Quaker preacher and spent the last ten years of her life in the ministry, during which time she went on a mission to Ireland (13) and other places. John lived to be 90; on 28th July, 1777, Robert Milner instructed Francis Willison, gravemaker, to "Make a Grave this day in a Friend's Burying Ground at Fersit House, and therein lay the Body of John Hebden, yeoman, in the parish of Hovingham ...".

Mystery surrounds Edith Hebden's marriage to Francis Flower of Kirkby Sigston near Northallerton, where her son Isaac Flower was born in 1737 and where Francis himself died two years later. Among the wealth of information which was recorded and passed down the family, his name never appears, even in Edith's own notebook, and in turn her name is omitted from his will, although his son Isaac inherited all his lands at Thirsk and his brother-in-law John Hebden received a derisory guinea. The Flowers lived in Northallerton and the area immediately to the east, including Winton, Sowerby and Kirkby Sigston, with other branches at Stokesley and Fawdington. During the seventeenth century they were weavers and tailors, the later generations being small farmers, and their names can be found in the records of the Guisborough and York Meetings. Francis's father, George, was both imprisoned and fined for not paying tithes, and the family occupied one (and sometimes two adjoining) shops on the south side of Westwaie, Northallerton, between 1622 and 1718.

John Hebden did not choose to pass Fersit House to his nephew Isaac Flower direct, but chose instead to leave it to Isaac's second son, Hebden Flower. An indenture was drawn up in 1767, when John was eighty years old, and Isaac, his wife Ann and two young sons joined the old man at South Holme, the actual title passing to Hebden, then aged 17, on John's death. After the funeral, John's nephew made a note of the various transactions which took place.

The stock and furniture in the house were sold for £46 14s. 0d., which almost paid off the various debts and expenses, including a bequest of £4 14s. 0d. for the poor of the parishes of Hovingham, Slingsby, Holm, Ness, Barton and Butterwick. It should have been £6. 5s. 0d., but bears the cryptic comment "note short". The assets included bonds and notes of hand to the value of £583, which were called in to pay the legacies.

Some money was not regained. After three years, two outstanding debts were partly paid and written off, whilst the entry relating to I. Hutton, who owed £12 12s. 0d., has written beside it "not worth the money, and lent for a drowned horse". One debtor was a priest, I. Caley Junior, who owed £105. Isaac Flower wrote "Absconded, paid a third" and at the foot of the page he added succinctly: "Some of the lowest in bad hands, a Suit cannot answer any good purpose. N.B. I Caley Jnr. a Priest cannot be made bankrupt; keeps close lodging. Uncle told me, he would leave me such a Will to prove as Father left Mother or partly; so it is". An enquiry "by Attorney where Caley was" cost Flower 5s. to no avail.

The cost of the burial came to something over £19, half of which was spent on food and drink comprising 5 stone 8lbs of beef, 50lb of mutton and 1 stone 7lb. of ham, together with mustard, cheese, tea, sugar and biscuits washed down with wine and ale. The wake must have been well attended.

While Hebden Flower remained at Fersit House, his older brother John bought a grocer's shop in Malton in 1790 and he, his son and his daughter-in-law continued there into the second half of the nineteenth century. And what became of Fersit House?

The identification of its precise location at South Holme proved difficult. The Census records from 1841 to 1861 inclusive showed that a homestead and small farm was occupied successively by Hebden's widow Elizabeth, her sons John and Hebden of whom John remained unmarried, and Hebden's son Isaac and grandson Hebden (the third Hebden Flower, who was born about 1845). By 1872, the local directory includes no Hebden or Flower in either Malton or South Holme.

Comparison of the modern Ordnance Survey map with the Tithe map and Schedule of 1839/40 shows that the house and its adjoining burial ground are now unrecorded - in fact they were unrecorded in 1839 for the simple reason that, together

with their surrounding fifty acres or so, they were not liable for tithes, a possible legacy from Roger Hebden! A blank space on the Tithe Map merely contains the name "Hepton Flower", but is sufficient to show that Fersit House lay south of the group of farmsteads now shown as South Holme village, in the low land away from other habitation and butting on the dyke and the Wath Beck, chosen perhaps for its very isolation and remoteness. Local enquiries failed to discover any folk memory of the name of the house, but it may perhaps be discovered still in existence as a field name, as Hepton Hill remains at East-horpe, a reminder of people long since gone.

Acknowledgements

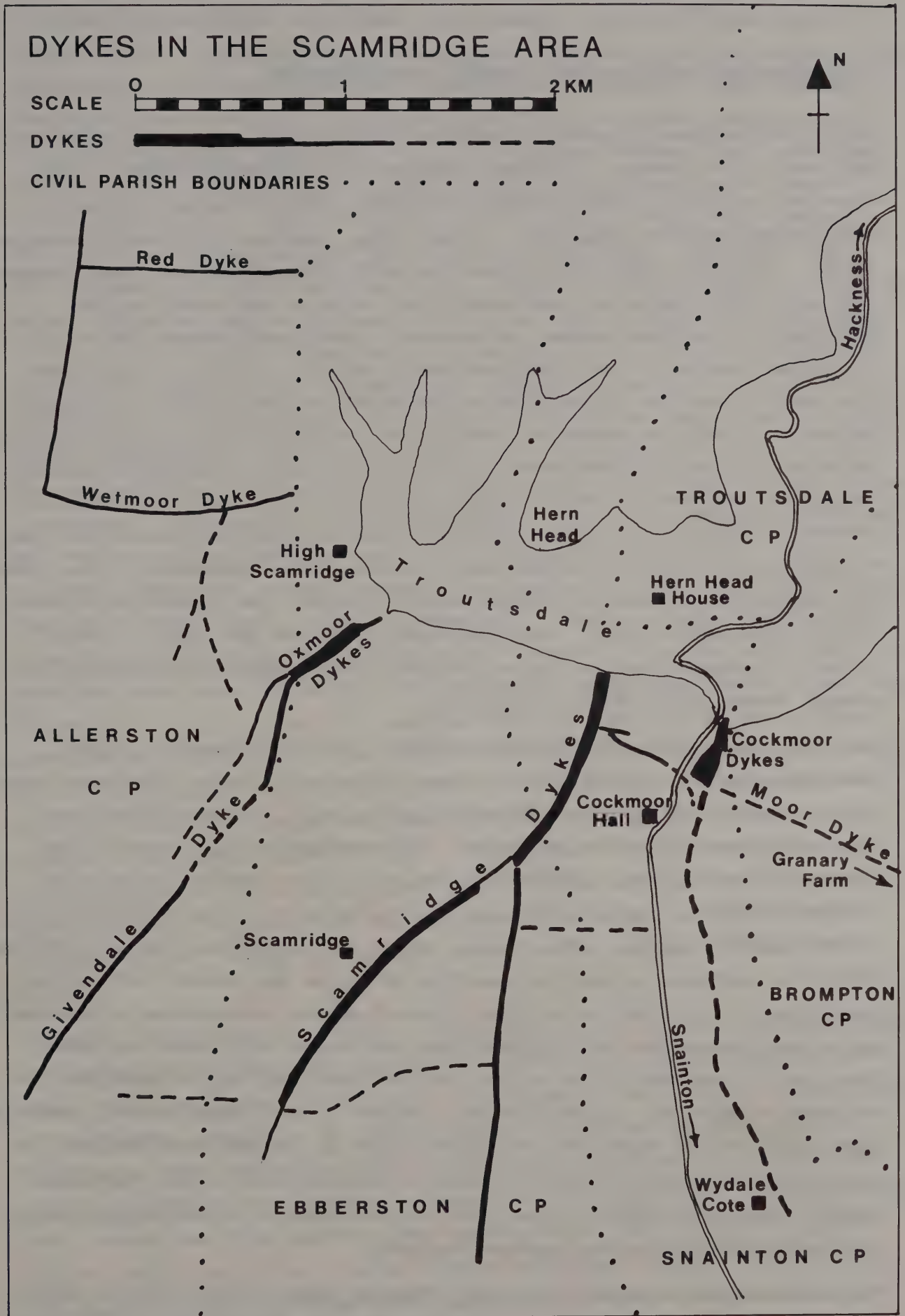
My thanks are due in particular to Geoffrey Makins of Malton, for his valuable help, to the staff at the library at Friends' House in the Euston Road and to others who have provided facilities or assistance.

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COCKMOOR DYKES AND RABBIT WARRENING



COCKMOOR DYKES AND RABBIT WARRENING

One of the features of Yorkshire prehistory which greatly enhances its interest and fame is the presence in Eastern Yorkshire of widespread networks of dykes. These are very long ditches-and-banks which run, often for miles, across the countryside, sometimes comprising a single dyke, sometimes with several running abreast. They are found widely across the Wolds, though many have been ploughed out, and on the Tabular and Hambleton Hills, and to a less extent on the Howardians. These huge systems are unknown in Continental Europe, and only in the Wessex counties do they find parallels in Britain. There is little doubt that most of them date to the first millenium BC, and that their main original purpose was simply as boundaries, marking the outlines of prehistoric territorial estates of much the same order of size as the present townships or parishes, though they may have had other functions as well - for example as barriers to prevent the straying of cattle. We have to get away from the idea of late prehistoric people living in isolated huts, farming little clearances in the forest. They managed great tracts of farming country, and the dyke systems are evidence of their community efforts. Not infrequently the dykes are still in use as township boundaries, and one may well wonder to what extent the origins of our present boundaries lie deep in antiquity.

One of the most spectacular and interesting of the dyke systems is in the Scamridge area of the Tabular Hills. Here, lying on the upland lime-stone areas of the townships of Allerston, Ebberston and Snainton, are three major dykes; from west to east, they are the Oxmoor, the Scamridge and the Cockmoor Dykes (Fig. 1). They all run southward from the edge of the limestone scarp overlooking Troutsdale, down the sides or into the heads of dry valleys which open on the Vale of Pickering. They clearly divide the terrain into strip territories across the contours, in much the same kind of way as the present civil parish boundaries. All of them are multiple dykes of massive construction at the scarp, and almost impassable especially when they are covered with trees and bushes. They tend to decrease in size as they run southward, but this is sometimes due to later destruction. Oxmoor Dyke has a maximum of four dykes abreast, Scamridge Dyke has six at the scarp, but the Cockmoor Dyke is the most extraordinary; it has no less than twenty ditches and banks of various sizes at the Troutsdale scape. They can be easily visited for they are adjacent to the car-park where the Snainton-Troutsdale road crosses the scarp.

The Cockmoor group of dykes is unique. There is nothing like it in the Wessex dykes or on the Yorkshire Wolds. To be sure, on the Huggate Dykes on the Wolds

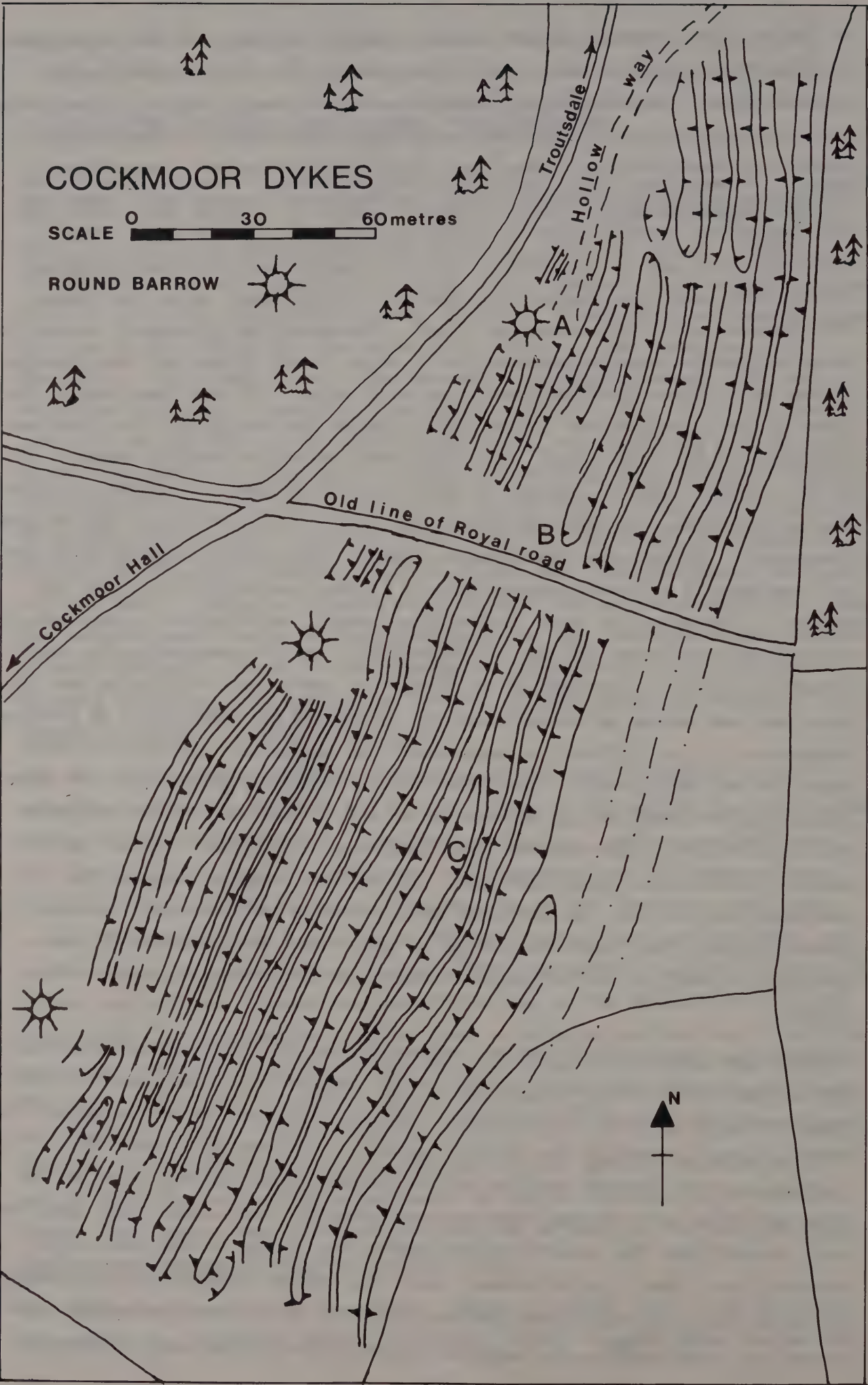
we find six dykes running abreast across a saddle, but they are the convergence of dykes from valleys on both sides of the saddle, not at all resembling the Cockmoor Dykes. The astonishing Cockmoor series has been a source of speculation for many years and must clearly have some unique explanation, either related to prehistoric times or later. They were first described by Rev. George Young in his History of Whitby published in 1817, as "opposite Cockmoor Hall, where the bank beyond the watering place is fortified from top to bottom with trenches extending about half a mile, from 12 to 20 in number, but small and irregular. Perhaps they have been occupied by a hostile British force, while the Romans were encamped within the Scamridge lines". Throughout the nineteenth century the older antiquaries were so impressed by the size of many dykes that they thought of them as military fortifications of an early date. J.R. Mortimer studied the dykes in the Scamridge area in the 1890s, against the background of a lifetime's experience of the Wolds dykes. The Wolds dykes he saw as boundary markers, but in the Scamridge area he thought the dykes were "less used for enclosing ground than on the Wolds, and they are more in the form of lines of hollow ways of great dimensions". He described the Cockmoor dykes: "For a short distance there are yet remaining 18 adjoining ramparts and 17 ditches running parallel with one another". The group, he said, encloses two tumuli, one of which he dug into, to discover that the dykes did not run beneath it. And he commented on the small size of the dykes on the west of the group. He came to the conclusion that the dykes may have served as covered ways for escape for the inhabitants of sheltered Troutsdale. It is difficult to understand this conclusion, for some of these dykes are not through-ways, some indeed being blocked by the barrows, and there is only one trackway leading into the north end of the dykes, which indicates that only one small dyke had ever been used as a thoroughfare. Access at the ends is in fact often quite difficult. Sir Mortimer Wheeler examined the Scamridge area in 1930, and concluded that the dykes were boundary features, commenting that "the frontiers omitted by nature have been supplied by the handiwork of man", an opinion which is shared by most modern students of the dykes.

However, the problem still remains, why should the dyke builders have made such massive earthworks when, as elsewhere on the Tabular Hills, much smaller dykes could serve the purpose of boundaries. And in particular, how do we explain the score of dykes abreast in the Cockmoor group? To attempt to answer this question we have surveyed profiles of the Cockmoor dykes on both sides of the farm road which cuts through them east-west near the scarp edge. This road must have crossed them from monastic times onward, for it lies on the line of the medieval Royal Road (King's Highway) which ran between Hackness and Lastingham, following the scarp edge above Troutsdale. North of the road the section comprised six large banks on the east and six small ones on the west, whereas to

COCKMOOR DYKES

SCALE 0 30 60metres

ROUND BARROW



the south of the road there were three large banks on the east and fourteen small ones on the west. Three large banks on the eastern side of the southern section have clearly been removed, and this must have taken place in fairly recent times, for all six large dykes are present in this sector in the first edition Ordnance Survey map of 1853, and at least five large ones are on Mortimer's drawing published in 1906. So we can be sure that there were originally six continuous large dykes and a variable number of small ones to the west of these, which on the whole decrease in size from east to west.

Moreover, there are some tell-tale signs on the ground that the small dykes are not all-of-a-piece with the larger ones, and were built at some later time. Firstly the deep hollow way (A in Fig. 2) emerging up the clough leading from Troutsdale (the predecessor of the present road at this point), leads through the small dykes on the north side of the Royal Road to which it seems to have been connected. There are large banks on either side of this track, and banks on either side of these are small and irregular. Secondly, the Royal Road seems to have incised through the large prehistoric dykes (B in Fig. 2) but the small dykes seem to terminate short of the Royal Road, at least on the north side where this can be clearly seen. This seems to show that the road is later than the large dykes, but earlier than the small ones. Thirdly, on the south side of the Royal Road the large dykes are conspicuously curved, whereas the smaller ones are straight (C in Fig. 2); at the interface between the two, a bank has been built straight across the curving arc of a large dyke to provide a straight alignment for the smaller dykes. In other words, the smaller dykes appear to be later.

Now in the Duchy of Lancaster records a perambulation of the boundaries of Brompton Moor is recorded in a survey of 1707, which includes the northern end of Cockmoor Dykes as the boundary between Brompton and Snainton. To quote the survey, the boundary of Brompton Moor ran 'by the north side of Sawdon, and so to a place called Grain End, and so along a moor dyke unto Snainton Six Dykes, and from thence Northwest to a place called Herring head ...'. Grain End is now Granary Farm, where the east end of the moor dykes is still preserved. Air photography enables us to track the dyke towards the Cockmoor Dykes, from which the Snainton/Brompton/Troutsdale boundary runs north and west to Hern Head (Fig. 1). In other words there seems little doubt that the Cockmoor Dykes were called Snainton Six Dykes in 1707 after the six major dykes. Not until Young's 1817 description do we read of the "small and irregular dykes".

There was only one major industry in this area in the eighteenth and early nineteenth centuries which could have produced such earthworks, namely the rabbit warrening which was in its heyday in those years across the Tabular Hills from Dalby to Troutsdale Brow. This was a considerable industry, but poorly documented and less important than the warrening on the Yorkshire Wolds and in



Cockamoor Dykes Aerial View

Lincolnshire. Young's History of Whitby records that in 1817 there were above 6,000 acres on the Tabular Hills given over to warrening; two warrens at Dalby of 1,700 and 1,100 acres, 1,200 acres at Allerston, 700 at Scamridge, 400 at High Scamridge, 400 at Troutsdale, 300 at Cockmoor Hall, and some smaller warrens. The major warrens each produced several thousand rabbits annually. Young's data can be confirmed by studying the first edition Ordnance Survey maps of 1853 which show the location of many 'rabbit types' (tipping traps) which still survived in precisely those areas stated by Young, though by this time most of them had probably fallen into disuse. As Harris (1970) shows, warrening in Yorkshire saw a swift decline and virtual extinction in the nineteenth century, as other uses of the land became more attractive, and the warrens became 'looked upon as an affront to a well conducted neighbourhood'. Rushton (1976) confirms this general picture from the Dalby area, showing, among other factors, that the price of rabbit skins halved in the years after the Napoleonic wars.

The techniques of warrening are described, as they applied to conditions in Lincolnshire, by Arthur Young (1813). These techniques changed somewhat in the nineteenth century, when wire-netting became cheaply available, and such warrens as survived on rural estates had a sporting element, as well as an economic purpose. J. Simpson's The Wild Rabbit (1893) describes this kind of warrening and draws particular attention to the importance of southerly slopes for warmth, the need to raise mounds for burrows where the terrain is flat (to avoid flooding the burrows in a rainstorm), the spacing of mounds to provide adequate pasture between them, the necessity of winter care of breeding animals and the need for generous feeding with green and root vegetables in winter and in very dry summers. There were several methods of trapping. Firstly, there was the 'rabbit type', a stone box into which the rabbit fell from a tilting lid, and which could be placed in a wall through which the rabbits passed (Young 1817). Where the burrows comprised isolated mounds, these could be covered by nets into which the rabbits were driven by ferrets. Or on suitable ground near the warrens the warrener could place a 'fold-net' several hundred yards long between the feeding grounds and the burrows, and drive the rabbits into it with dogs, as the rabbits returned at dawn from their feeding grounds to their holes (Strickland 1812). Simpson used a similar but more elaborate device employing very long wire netting.

To turn to the surviving evidence of the industry on the Tabular Hills, the best is on Hutton Nab, which is covered with spaced-out pillow mounds, and Spaunton Moor, where there are five elongated mounds in a group, which appear to be burrowing mounds. They seem to represent warrening on marginal land, whose exposed situations are hardly ideal or even practicable for the over-wintering of stock. Pillow mounds, either oblong or elongated, do not seem to have

survived in the warrens between Dalby and Cockmoor, even in the Dalby and Allerston areas where there were numerous surviving rabbit types in 1853, and where warrening in a minor way probably persisted until conversion to forest in the 1920s. In these latter areas the many riggs running south-west with their intervening valleys would provide eminently suitable south-facing slopes for burrowing. On the gentler, less deeply cut, upland landscape of Scamridge and Cockmoor Hall warrens, such slopes are infrequent, and it is reasonable to speculate to what extent the warreners made use of the great prehistoric dykes as boundaries or burrowing mounds or perhaps as both. Certainly, simple calculation shows that the areas of High Scamridge, Scamridge and Cockmoor Hall warrens, as given by Young, correspond to the areas enclosed by dykes and the Troutsdale scarp edge, so there are some grounds for associating the dykes with warrening. And one can readily imagine that both the warreners and their charges would welcome the ready-made burrowing areas provided in the large multiple dykes. Rabbit types are occasionally found associated with the dykes, on the 1853 OS map, as at Givendale Dyke and Cockmoor Hall, so that one could envisage both these and the fold-nets used as trapping methods.

It is perhaps against this sort of background that one needs to contemplate the problem posed by the fourteen small 'dykes' lying adjacent to the six large dykes at Cockmoor Hall. They certainly cannot be interpreted as true boundary dykes for they do not continue, like the large ones, down the valley towards Wydale Cote. Nor, with the exception of the hollow way emerging from Troutsdale, are they relics of ancient trackways, for they are interrupted by the round barrows. Their appearance in the eighteenth century coincident with the rise of warrening, and the existence of a rabbit type near their northern end, plus the clear presence of scores of old rabbit burrows in them, suggests an explanation, albeit not entirely straightforward. For it would seem unlikely that rabbits concentrated in such a large burrow on one boundary of the warren would have access to adequate feeding grounds. On the basis of spreading burrows in a controlled fashion around grazing areas, it does not make sense to concentrate a further fourteen long burrowing mounds where six exist already. This conclusion suggests that the construction of smaller dykes alongside larger ones had some special purpose.

Two possible reasons can be suggested. Firstly, it is possible that occupation over many years sours the burrows and there was need to provide new ones. The six prehistoric dykes may have provided the first burrows, and may have been successively replaced by new similar structures lying parallel to them. Certainly the height of the small dykes is similar to those of the Hutton and Spaunton burrowing mounds. Secondly, the proximity of the Snainton-Troutsdale road suggests the possibility of some form of intensive warrening. There is no doubt of the antiquity of this road; it is called Littledalegate in the

medieval charters. As with intensive farming today, intensive warrening would imply the bringing of feedstuffs to the stock rather than moving the latter to grazing. Both the access road and the storage facilities at Cockmoor Hall would dictate a position such as Cockmoor Dykes for this sort of operation. It might have been a continuous operation or, perhaps more likely, a method of over-wintering large numbers of breeding stock, perhaps including stock from other more exposed upland warrens. The annual harvesting late in the year involves indiscriminate trapping in rabbit types and would afford opportunity to sort out and move breeding stock to more advantageous over-wintering burrows that could be provided on the open warren.

Finally we must enquire whether other burrowing mounds are known of structure similar to the small Cockmoor dykes. Very long pillow mounds occur elsewhere, as at Spaunton (40 metres), in Ashdown Forest (up to 140 metres: Sheail 1971) and in Glamorgan (up to 40 metres: RCAHM, 1982). There is, however, only one report of close groups of long banks. Lineham (1966) reported that on Dartmoor "there are huge mounds up to 40 metres long by 8 metres wide. In places an old boundary ditch and bank seem to have been re-used to form a succession of long mounds with only a few feet between them to form a gap". There is no report of mounds grouped alongside each other as at Cockmoor.

Thus, although we cannot conclusively demonstrate the link with rabbit warrening, we offer it as the only reasonable explanation of the unique and astonishing spread of the Cockmoor Dykes. As with so much archaeology, field and documentary work can take us so far. Perhaps only an excavation can now bring us nearer the truth.

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A LOOK AT RYEDALE SETTLEMENT PATTERNS

1. INTRODUCTION

In recent years there has been a move among scholars studying ancient settlement patterns to refute the traditional idea of Britain's past being a series of 'invasions', when a number of different peoples moved on to the landscape, each sitting in areas that suited their own economies, with the settlement pattern therefore substantially changing with each new age. Indeed scholars are increasingly moving towards an interpretation in which the continuity of settlements is emphasised and the amount of change in the pattern minimised.

The aim of this article is to test this hypothesis and see whether settlement patterns do change with time, and if so, how and why. At the same time it was hoped to test the idea that in order to maximise the use of natural resources such as water and arable, grazing and woodland, settlements would become more regularly spaced with time.

A circular area six miles in radius with the centre at Helmsley was chosen and it was decided to analyse the change in settlement patterns between the Mesolithic (beginning 7600 B.C.) and the Domesday Book (1086). The area was suitable as it was a manageable size for field work but contained traces of settlement in all periods. It also covered two natural regions, firstly the oolitic limestones and calcareous gritstones of the Upper Jurassic North Yorkshire Moors and, secondly, the clay deposited by glaciers and the alluvium deposited in the resulting lake which when dry became the flat Vale of Pickering. The contrast between the two environments of the region was a major factor in deciding the changes in the settlement pattern.

The programme of investigation began with the mapping of settlement sites for each of the six periods. This proved more difficult than expected and a considerable number of sources had to be gleaned for the final picture (1). The majority of sites were then visited in the field and factors which would have encouraged settlement noted, before any conclusions were drawn from the maps. Finally, 'Nearest Neighbour Analysis' was chosen to show whether the settlements became more evenly distributed in the different periods. This technique relates the mean distance between nearest neighbours (for instance round barrows in the Neolithic period) to the distance that would be expected if the pattern was a random one. Index values (RN) approaching 0 show clustering and a perfect regular distribution has an index value of 2.15.

The formula is:

$$RN = \frac{\bar{D} \text{ OBS}}{\bar{D} \text{ ran}} = \frac{\text{measured distance between site and nearest neighbour}}{\text{calculated mean distance if the distribution is random}}$$

$\bar{D} \text{ ran}$ is given by the formula:

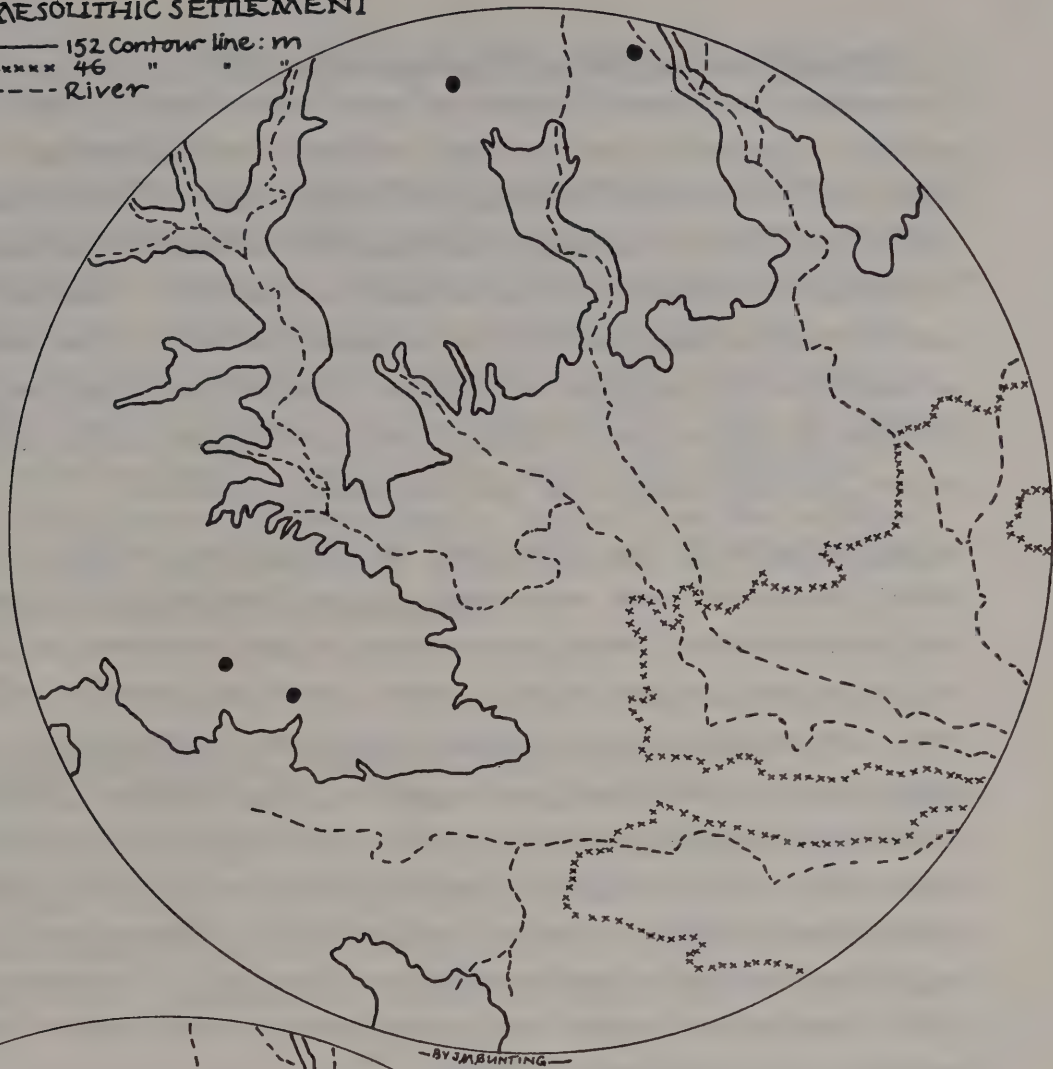
$$\bar{D} \text{ ran} = 0.5 \sqrt{\frac{A}{N}} \quad \text{where } A \text{ is the area of study and } N \text{ the number sites.}$$

The survey has a considerable number of "structural faults" which casts doubt on the pattern which emerges and the conclusions that are drawn from them. The pattern is misleading due to three factors. Firstly, particularly in the early period, we often do not actually know where the settlements are and have to use evidence which only implies nearby settlement such as finds of worked flint or burial mounds. Secondly, there is undoubtedly a great deal of destruction of evidence (such as the ploughing out of barrows) which has irreparably distorted the true pattern. Thirdly, the types of settlements studied are not exactly comparable. A Roman villa is not a village, neither is a hut circle, and the makeshift dwellings of the nomadic Mesolithic men were not even houses. Even when we allow for the settlement pattern to be roughly correct, the conclusions we draw from it are still open to criticism. Nearest Neighbour Analysis can give misleading results, especially when, as here, the density of settlement patterns vary. Most importantly the project is basically geographically deterministic, an approach which is coming under increasing criticism. There is no inevitability about the distribution of settlement and a site may have been chosen for reasons which are unclear today. Indeed in most cases it is probably misleading to think of settlements being consciously chosen at all.

Nevertheless, for all the project's faults and distortions, a definite pattern of settlement changes emerges, which is both clear and not easy to refute. In its most simple form, the majority of settlements move over the nine thousand year period from the high ground of the Moors and Howardian Hills, down to the heavy alluvium of the Vale of Pickering. And in each period it does seem that the vast majority of settlements can be explained by each era's economic needs, technological capabilities, socio-political stability and the environmental physical situation, and only rarely need recourse be taken in the illogicalities of the human decision-making process.

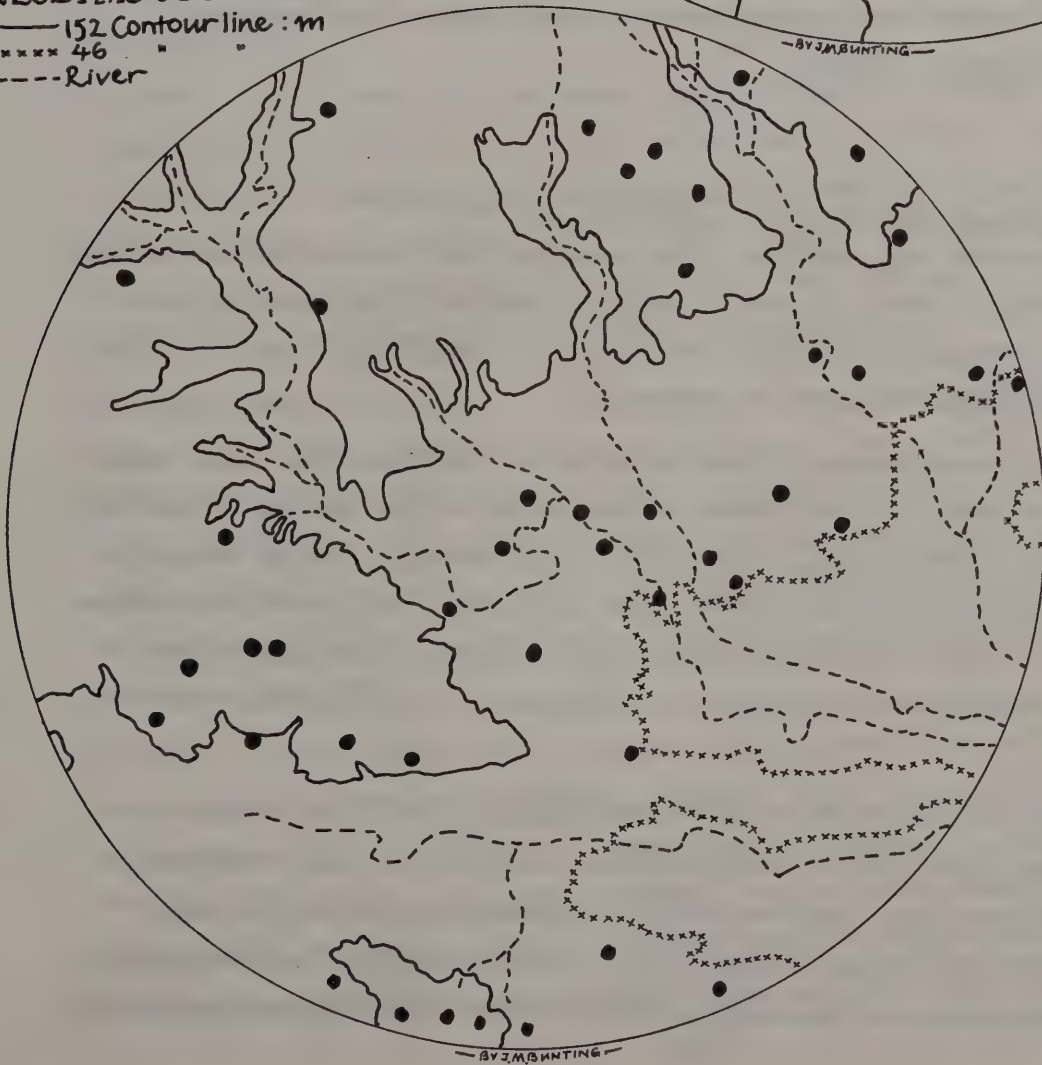
MESOLITHIC SETTLEMENT

— 152 Contour line : m
 ***** 46 "
 ---- River



NEOLITHIC SETTLEMENT

— 152 Contour line : m
 ***** 46 "
 ---- River



2. Mesolithic Settlement c7600 BC-3500 BC (Map 1)

The earliest settlement pattern we have in this region, that of the Mesolithic period, is probably also the most inaccurate and misleading, for in this era before man had invented farming, he lived a nomadic, hunter-gatherer existence and did not live in permanent settlements, instead moving around seasonally, following the movements of the animals he lived on. However, he does seem to have settled in some areas for an extended period of time, and these sites can be identified by the piles of knapped flint he left after making his tools. In the area of the survey all four of the surviving sites are above the 152m contour on the limestone moors, and this is easily explained.

Pollen analysis (2) has shown that in this period the Vale of Pickering was a thickly vegetated swamp surrounded on the edges by thick birch, elm, lime, oak and alder forests. Mesolithic man would have preferred to live higher up where the oolite geology gave rise to scrub, heath and grassland with some pine and hazel, and this suited his economic needs and technological capabilities. His simple flint tools did not easily enable the clearing of thick woodland, and economically he had no need to do so, for the red and roe deer, wild pig, and auroch (wild cow) on which he hunted would have found the leafy browse and grassy ground restricted below, and prefer the higher ground; and man would have had as much access to berries and roots there as in the swamp. Thus the Mesolithic distribution pattern can be explained by reference to environmental, economic and technological factors.

3. The Neolithic and Bronze Ages c3500 BC-c600 BC (Map 2)

The Neolithic and Bronze Ages saw the first permanent settlements as man settled down and learned how to farm. However, none of these early settlements have survived or been discovered yet and we are forced to imply their position from the surviving stone burial mounds (or barrows).

The distribution of these barrows is concentrated on the limestone moors above the 152m contour, although a few cluster on the clays of the Vale of Pickering between the 152m and 46m contours, avoiding the still swampy alluvial deposits, and sometimes a surprising distance from water supplies. This new distribution can be explained by differing environmental, technological, and particularly the new economic factors, as man sited his settlements for an agricultural way of life.

The environmental situation seems to have been generally similar to that of the Mesolithic except that pollen analysis shows much of the high land forest cleared for agricultural use, and the Vale of Pickering clays seem to have dried out in a period of optimum climate (3). Technologically, man was able to clear the thick vegetation on the clays with his bronze axes but was unable to

plough the alluvium due to its swampyness and the light weight of his primitive plough.

He thus settled on the clays and the high ground overlying the oolites as these areas gave him the light, dry agricultural land he needed for a mixed pastoral/arable economy rearing pigs, sheep and cattle, and growing cereals (although the latter would only have been successful up to an altitude of 300m) (4). The distance of some of the sites from water is perhaps explained by the fact the barrows were probably meant to be seen from some distance (as either a monument or boundary marker) and so placed on top of hills, while their respective settlements were probably nearer the water supply, further down the valleys. Alternatively the era could have been one of social upheaval and the defensive qualities of sites put before that of convenience. (5)

4. The Iron Age and Romano-British Settlement c600 BC-c400 AD (Map 3)

Another change in the settlement pattern occurs at the end of the Bronze Age, and this new pattern continues through until the Saxon invasions, surprisingly unaffected by the Roman occupation and the siting of Roman villas in the area. The evidence for settlements is again ambiguous: does the presence of a quern, a collection of coins or a Romano-British burial necessarily mean a settlement lies nearby?

However, if we accept this evidence, we are rewarded with the emergence of a clear pattern with all sites firmly below the 152m contour, sited on dry islands of boulder or kimmeridge clay; springlines between the limestone and either the alluvial bottom or the clays or in river valleys. All settlements still avoid the alluvium itself and are all above or on the 46m contour which would now appear to be the boundary between the wet and dry land.

What were the reasons for this clear move of settlement downhill? Firstly, there is the joint factor of soil exhaustion on the uplands and the clearing and drying out to the 46m contour of the previously heavily vegetated and swampy Vale of Pickering. Developed on nutrient-poor parent rock, badly farmed and cleared of protective tree cover, the upland soils appear to have become leached and acidified by 600 BC, and pollen analysis has shown the area to have finally turned to moorland.

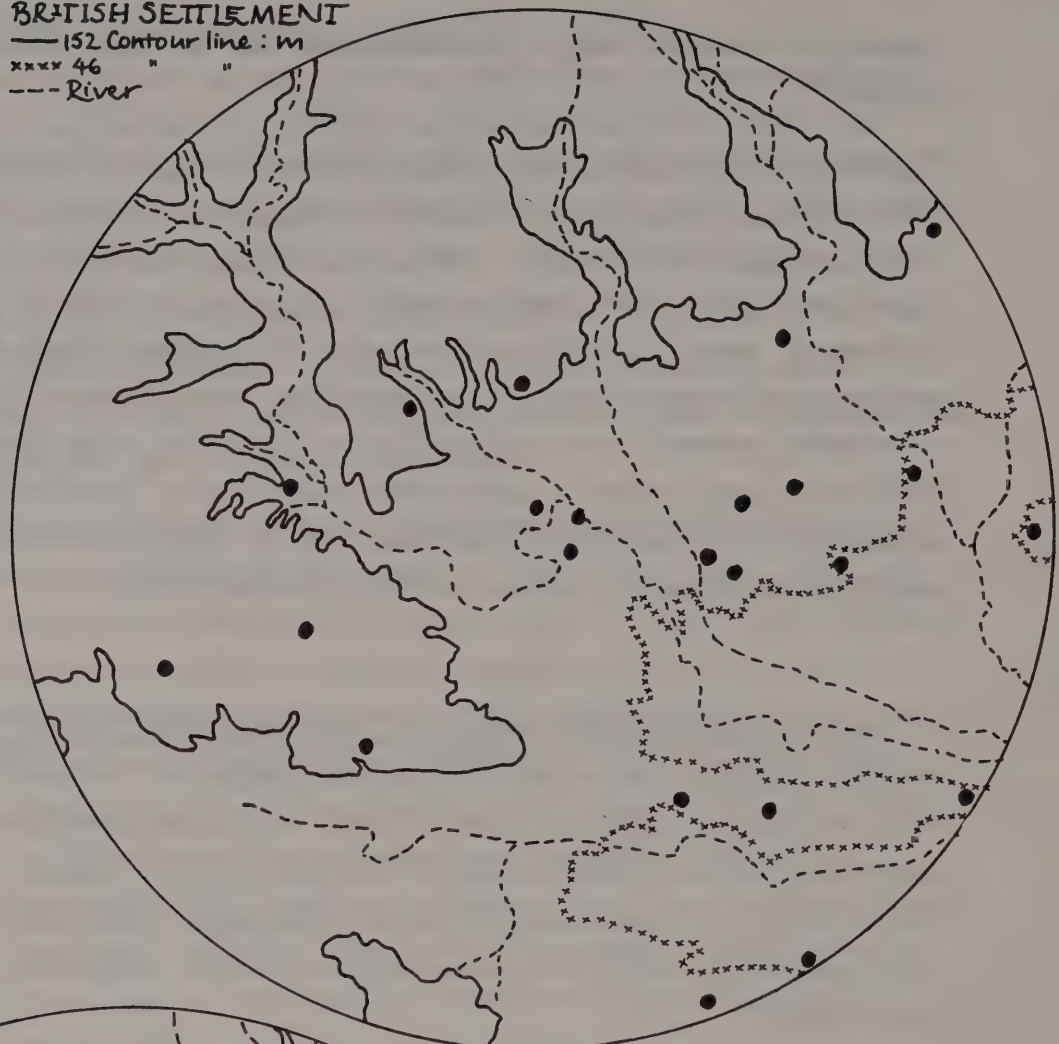
However, the inhabitants still needed well-drained light soils or clays and access to water for their pastoral economy, based on cattle ranching and cereal cultivation, but did not have a heavy enough plough to cultivate the alluvial bottoms. Therefore, they moved downhill to the newly-drained area between the 152m and 46m contours, aided by the fact that the area seemed to be enjoying an age of social stability, meaning that there was no need for a defensive site.

IRON AGE AND ROMANO~ BRITISH SETTLEMENT

— 152 Contour line : m

xxxx 46 " "

--- River

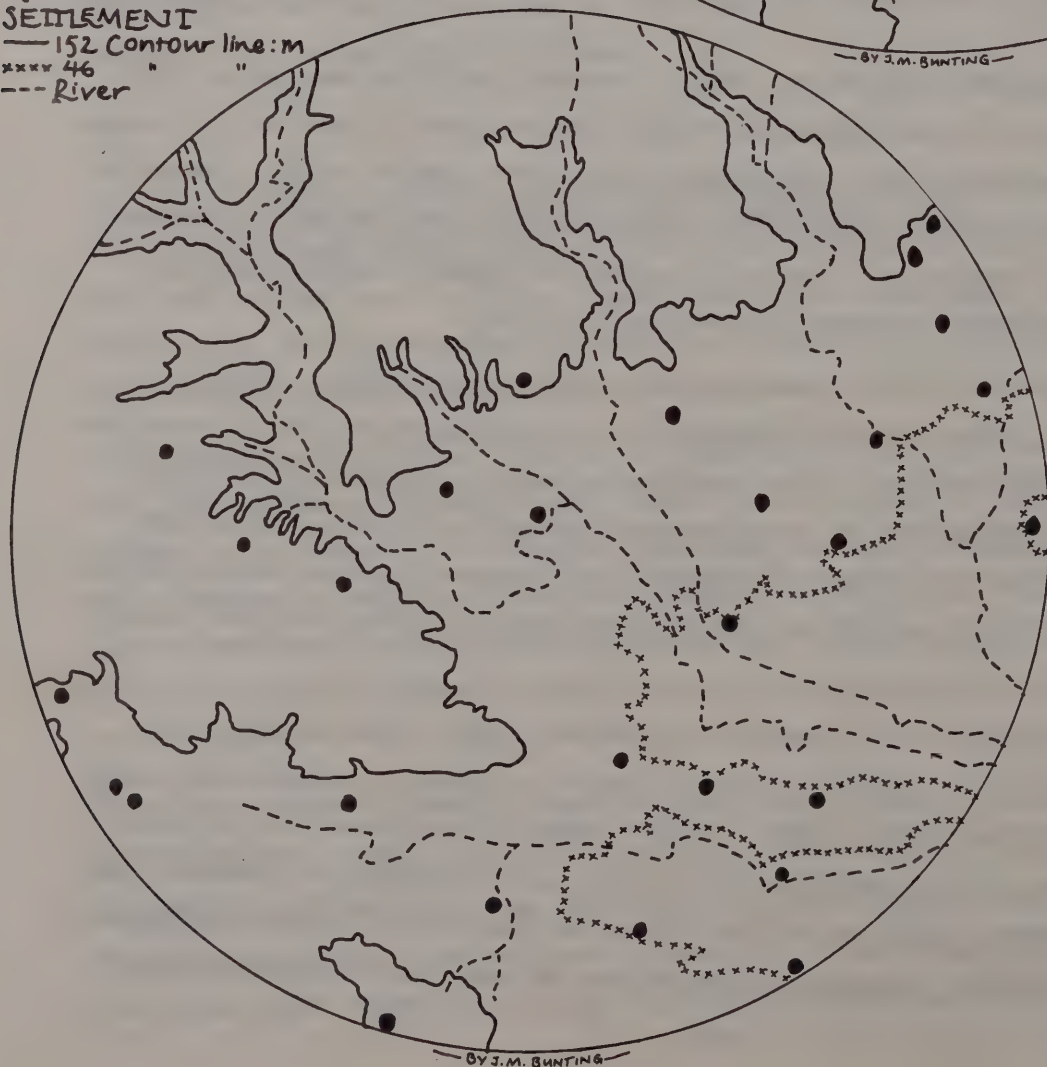


ANGLO-SAXON SETTLEMENT

— 152 Contour line : m

xxxx 46 " "

--- River



Again the settlement pattern is a result of the interaction of economic, environmental, technological and socio-political factors.

Anglo-Saxon Settlement c400AD-cl100AD (see Map 4)

With the Anglo-Saxon period (and the first settlement pattern to in any way resemble the modern one) we enter into an area of deep controversy. The traditional idea of incoming Angles, Saxons and Jutes driving out the native population and settling on their land is now being challenged, and it is now in vogue to see the incoming barbarians as far less numerous than previously thought and, rather than fighting the native population, settling beside them and occupying areas which had not previously been intensively cultivated. Continuity, rather than change, is now emphasised.

However, in this area the hypothesis is not backed up by the evidence of the survey. The Anglo-Saxons brought no new technology with them and there seems to have been no environmental change between the Roman and Saxon periods with the result that the newcomers settled in the same area on the map as the Romano-British - between the 152m and 46m contours. However, except in five cases (Helmsley, Carlton, Gillamoor, Hovingham and Great Edstone circles), there is no evidence of the Anglo-Saxons settling on Romano-British sites (compare map 3 and 4), and even on those sites there is no evidence of actual continuity. The Romano-British population seems to have completely disappeared and people speaking English have moved in and named their settlements with their own dialect.

Thus the mapping of place-name evidence shows a picture of a completely new settlement pattern with the same environmental limitations of the now agriculturally useless moors and the over-heavy soil of the alluvium. In particular settlements are normally found on springlines between the oolite sandstone and limestone and either the alluvium or the clays. However, a few sites are located either on the clays within the Vale of Pickering or in the river valleys. A glance at the modern geological map shows this up very clearly.

Overall, the pattern is of far more sites being clustered in and around the dry parts of the Vale of Pickering, where the Anglo-Saxons could practise their predominantly arable economy within reach of arable or grazing land, water, fuel and building materials. There is, however, evidence of four settlements on sub-optimal land above the 152m contour and this confirms what is known from documentary evidence of a degree of population pressure on the good land.

6. The Viking Intrusion into this Pattern c800-1100 (see Maps)

The pressure on the land was increased around the ninth century by the intrusion into the Anglo-Saxon settlement pattern of a considerable number of Scandinavian speakers. These "Vikings" (the name means pirates and is hardly suitable for farmers) do not seem to have invaded, raped and pillaged as was traditionally thought, but settled alongside the indigenous population and in particular moved into areas which had not been previously settled. Map 5 shows sites which have Scandinavian place names or Viking-style sculpture and the complete settlement pattern at the end of the tenth century can be got by combining Maps 4 and 5.

The Scandinavians moved into two areas, settling heavily in the Vale of Pickering (they were the first to settle on the alluvium and go beneath the 46m contour), and also moving into the river valleys above Helmsley, to the more marginal land. Like the Anglo-Saxons, they always settled close to springlines or rivers.

This pattern is explained by the new political, technological, environmental and economic factors. For settlement to be feasible on the alluvium, it must have dried out, but more importantly they were only able to exploit it agriculturally due to their introduction into the area of the heavy ox- or horse-drawn plough. The heavy land was what they were used to in Scandinavia and so they would have felt perfectly at home in an environment unusable by the Anglo-Saxons. Their settlement of the marginal land around Hawnby can in turn only be explained by the fact that they must have come peaceably, and respected, or were made to respect, the Anglo-Saxons' right to hold land, and thus took what had not been used.

7. The Settlement Pattern from Domesday Book (1086) (Map 6)

The Norman Conquest of 1066 consisted only in the replacements of one ruling military class by another and did not affect the settlement pattern except in what was destroyed in keeping down rebellions. The area did suffer slightly in this way but did not bear the brunt of William the Conqueror's harrying of the North, and by the time of the Domesday Survey in 1086 (6), the area had generally recovered. Thus the Survey gives a complete picture of the settlement pattern at the end of the project - the turn of the eleventh century. The distribution pattern is basically that of the Viking and Anglo-Saxon patterns combined with one or two new settlements in the Vale of Pickering.

The picture is one of heavy settlement of the alluvial bottoms and clays, and in particular it is clear that nearly every settlement lies on a springline or near a river. Due to the high population, there was also some resettlement of marginal moorland. In all the picture is very similar to that of today

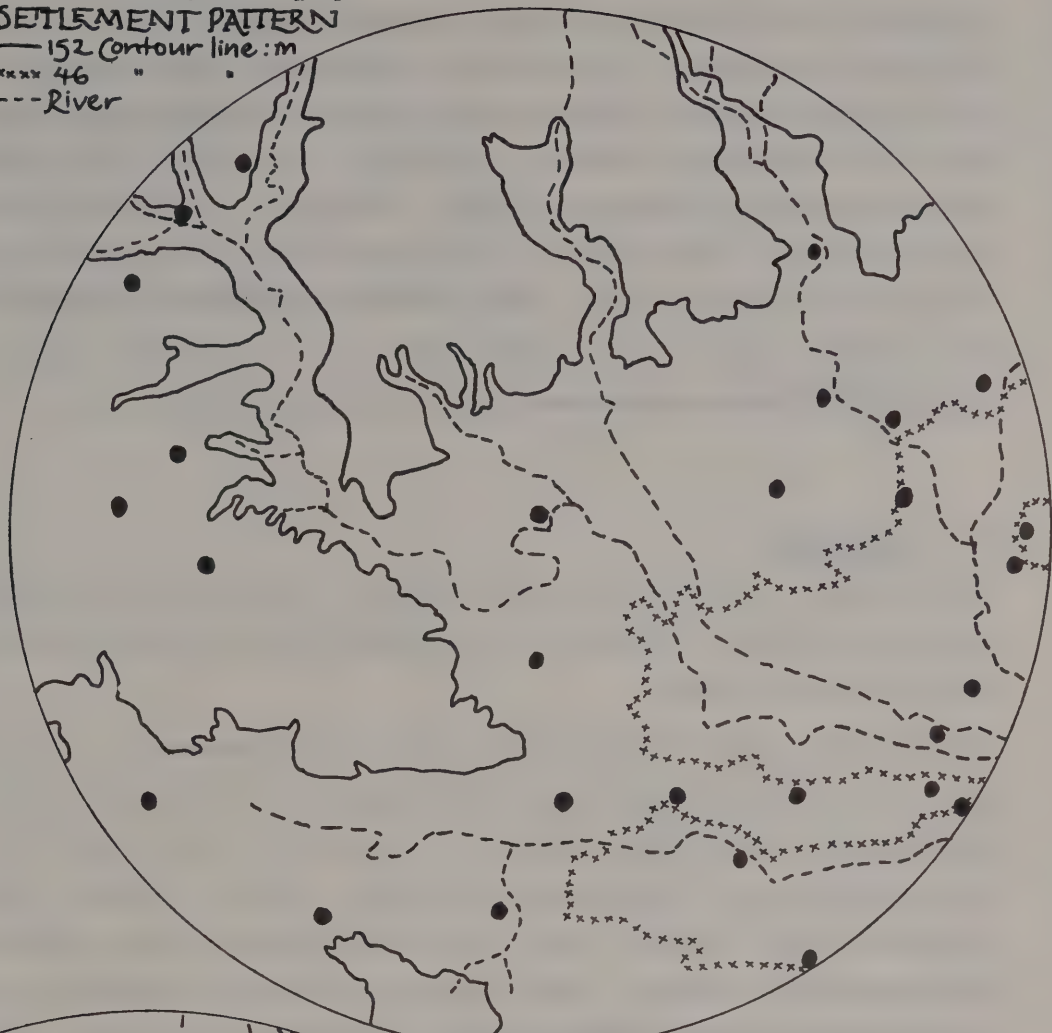
But the Domesday Survey does more than supply just the settlement pattern

VIKING INTRUSION INTO SETTLEMENT PATTERN

— 152 Contour line : m

xxxx 46 "

--- River



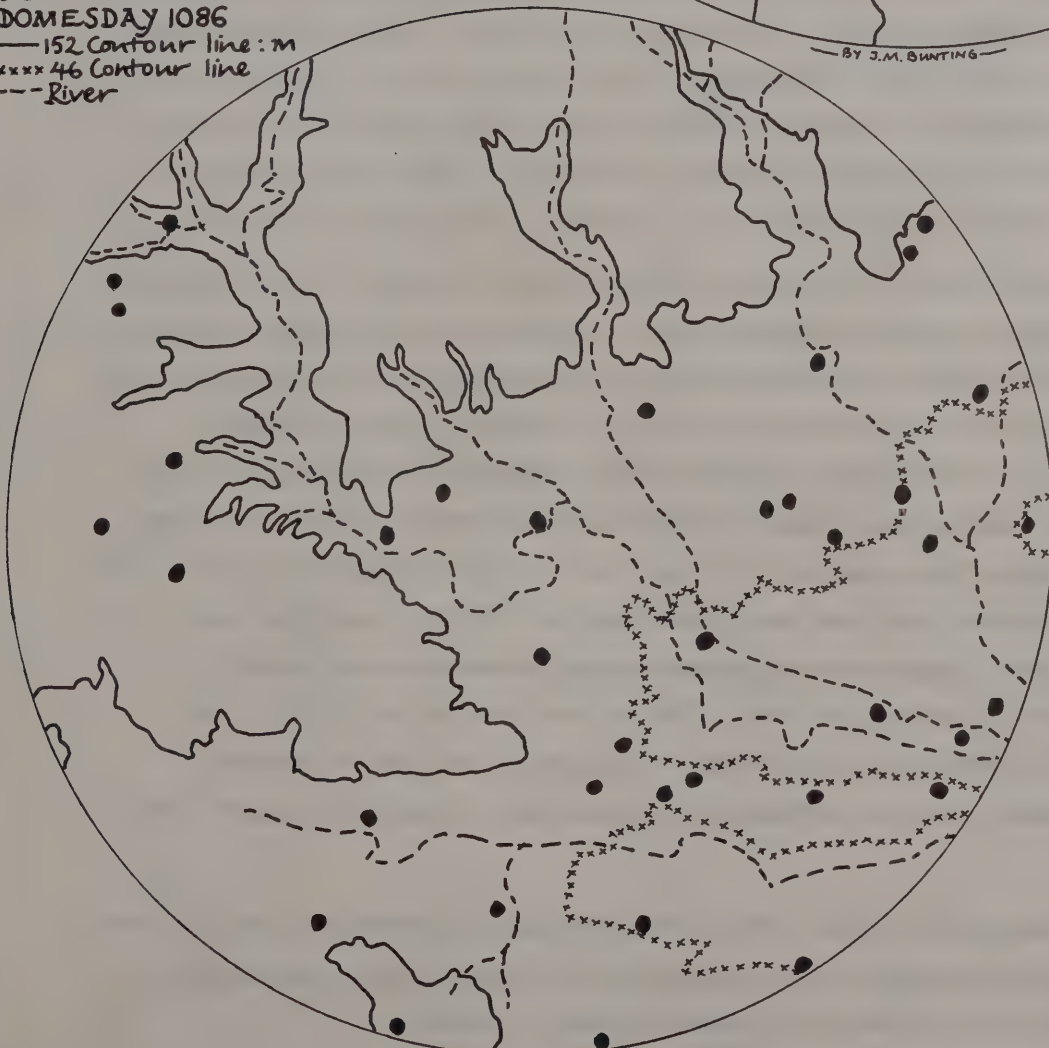
— BY J. M. SUNITING —

SETTLEMENT AT DOMESDAY 1086

— 152 Contour line : m

xxxx 46 Contour line

--- River



— BY J. M. SUNITING —

Firstly, it confirms what we have guessed about the Vale of Pickering compared with the high ground. At Daletown, near Hawaby three carucates (7) of land were worth eight shillings and at Fadmoor above Kirkbymoorside, five carucates were worth ten shillings. However, at Riccal, in the Vale, two carucates were worth an astounding one hundred shillings. Secondly, the survey gives the first population figures for the area. Two hundred and sixty-three male peasants are recorded and allowing each a wife and three children, a rough estimate of fourteen hundred people can be calculated - one-tenth of the present population. Of this about eleven hundred were below the 152m contour.

8. CONCLUSIONS

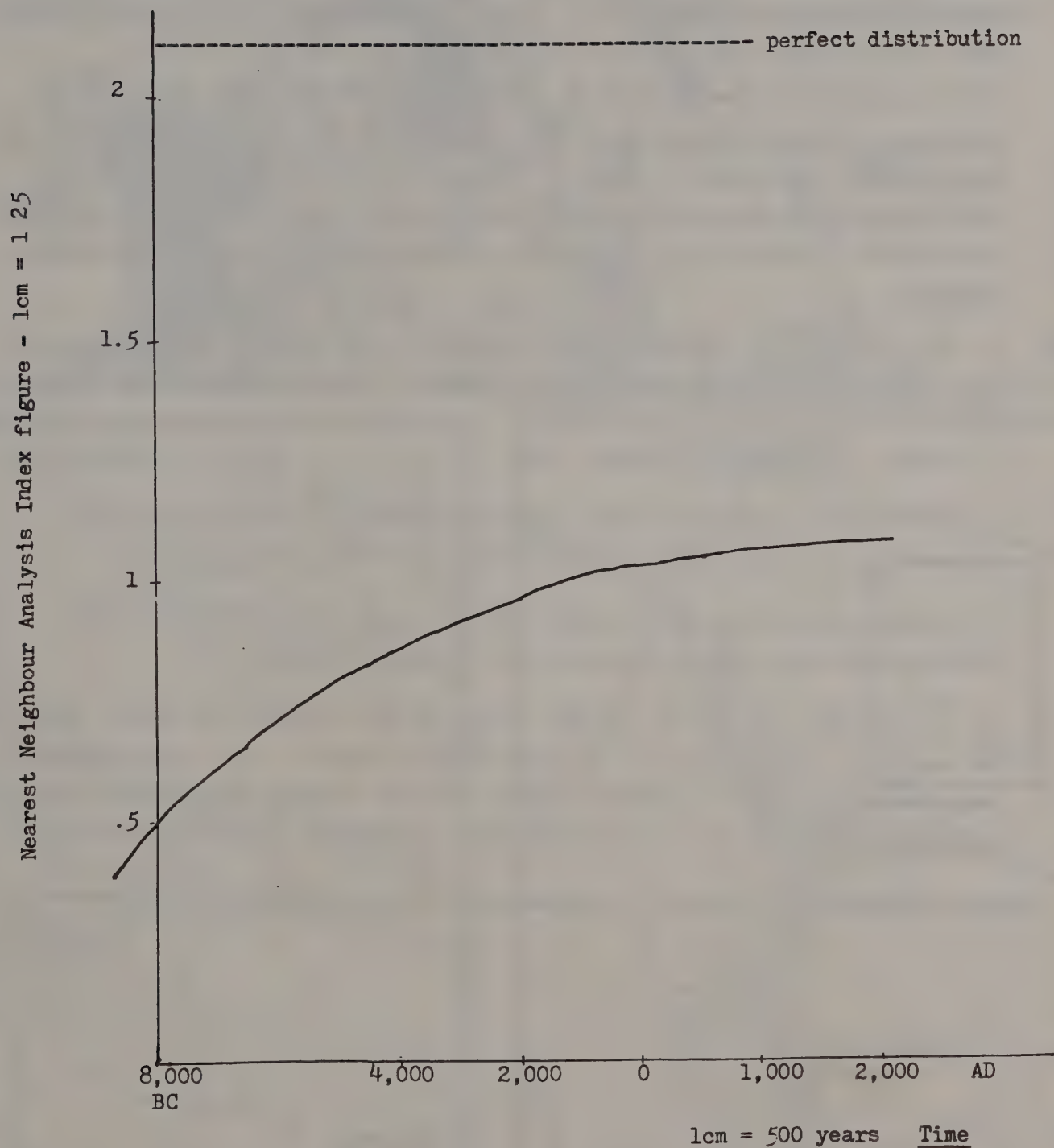
Thus, despite all the criticisms that can be levelled at the methodology of the project, a definite evolution of settlement distribution emerges and two conclusions can be drawn.

Firstly, the idea of general continuity of settlements is not applicable to this area. Settlement reflects the ever-changing relationship between man and his environment and is never static. In the area of the survey we see clearly how the distribution of settlement represents a balance between environmental dictates and man's economic needs, his technology and socio-political stability at that particular moment. These factors are always changing and the distribution of settlements reacts appropriately. There are, of course, some optimum sites which show evidence of continuous settlement for a vast period of time, but not one site has been continually occupied for the whole period, and only Helmsley and Hovingham can claim to have been settled permanently since the Neolithic/Bronze Age period, and even here there is no evidence of cultural continuity.

Nevertheless it is clear that an evolving pattern can be observed in the settlements. Nearest neighbour analysis figures show a picture of settlement patterns gradually becoming more evenly distributed before flattening out during the Iron Age, Anglo-Saxon period and the Domesday Book (see graph). Very clustered patterns are shown by the Mesolithic and Neolithic figures of 0.508 and 0.802. However, the pattern towards more even distribution continues with an Iron Age figure of 1.02, an Anglo-Saxon one of 1.04 and that of the Domesday Book of 1.08. In the Iron Age it appears that the best distribution for the area has been roughly reached and the figure does not change much after this, although it is still far from perfect distribution for a flat plain denoted by 2.15. The figures nevertheless show conclusively that to maximise the use of natural resources the settlement pattern definitely becomes more regularly spaced with time.

Thus the settlement patterns in the survey are continuously changing but in line with certain underlying principles, and these can be seen to be in operation throughout the whole span of the nine thousand years covered.

Nearest Neighbour Analysis distributions against Time



NOTES

- 1 The information concerning the distribution of sites was taken from the following sources:

The Prehistoric information came from the OS Archaeological records kept in the National Park Offices, but this only covered the moors and for movements outside this area the 6" OS maps, the tables in J. McDonnell's History of Helmsley, Rievaulx and District, D. Spratt's Archaeology of North East Yorkshire and lists of discoveries in recent Yorkshire Archaeological Journals.

The information for the Anglo-Saxon and Viking period came from Ekwall's Dictionary of English Place Names, The Place Names Society's Place Names of the North Riding, Collingwood's lists of Anglo-Saxon and Viking Sculpture in the 1907 Yorkshire Archaeological Journal, and churches from Pevsner's North Riding. The Domesday information was taken from a translation in the Victoria Country History.

- 2 "Prehistoric Environments" - R.L. Jones et al in Spratt's The Prehistoric and Roman Archaeology of N.E. Yorkshire (1982)

- 3 Goudie, Environmental Change, 1977

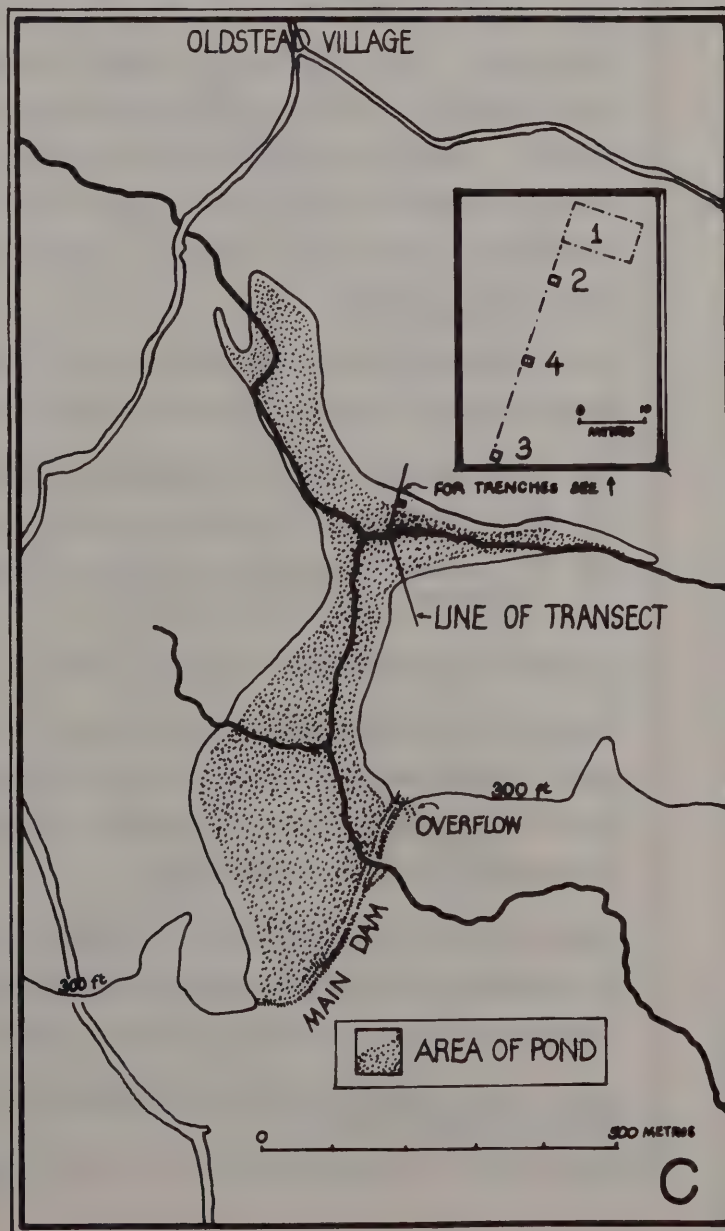
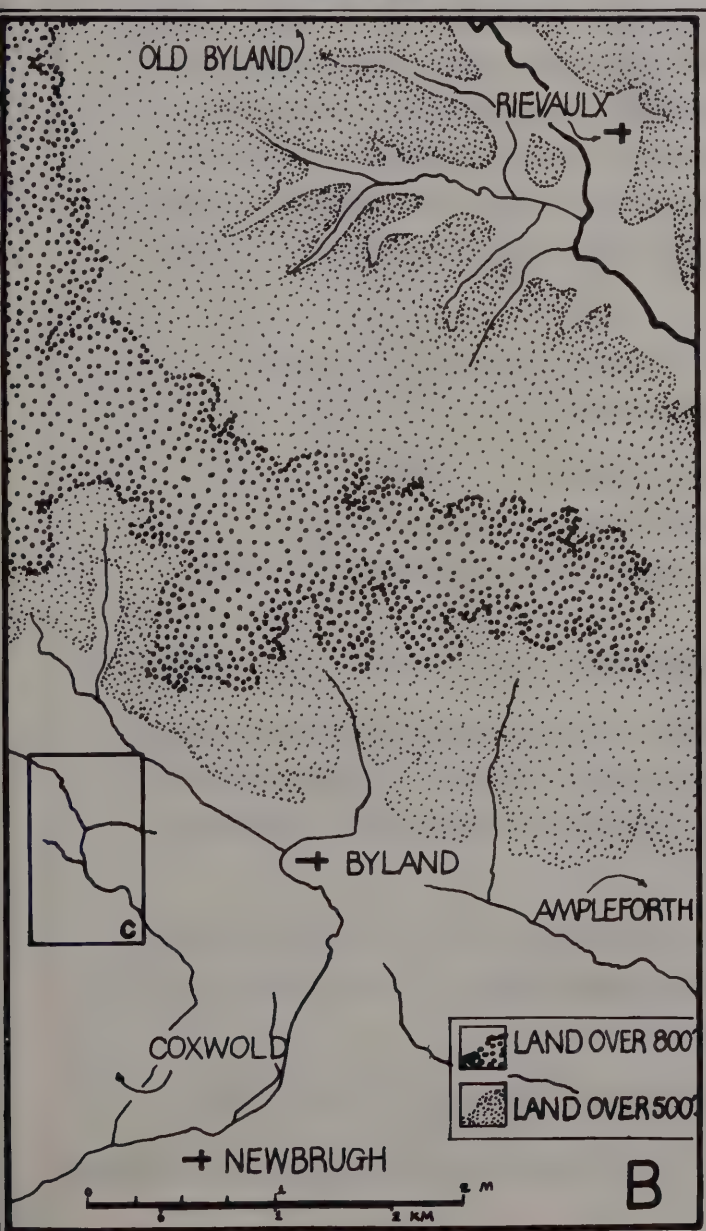
- 4 We know the animals he reared from remains found in barrows, and the information on cereals from pollen analysis (see Jones op cit.)

- 5 A third possibility is that the water table may have changed in four thousand years and that the barrows were originally nearer water.

- 6 The Domesday survey was ordered by William the Conqueror to see how much land he possessed, and how much tax he could extract from it. The inquestors tolled every settlement and established on oath from the inhabitants how much land was cultivated, how much it was worth and what was the male working population.

- 7 A carucate is an area of ploughed land; it varied from 80 to 120 acres.

FIG 1 : LOCATION MAPS



A FISHKEEPER'S STORE AT BYLAND ABBEY

Acknowledgements

Sincere thanks are due to the farmer, Mr. F.J. Banks, for allowing excavation and to the Department of Archaeology, University of York for loan of tools and other equipment and materials. Thanks also to the many others especially Chris Daniell, who gave their help and support during the excavations.

INTRODUCTION

The present paper is an interim report on archaeological excavations conducted at Oldstead Grange, North Yorkshire. A full report is in preparation.

Mr. John McDonnell in the paper Inland Fisheries in Medieval Yorkshire 1066-1300 (McDonnell 1981) referred to the site of a 'fishery hut' adjacent to a large pond, owned and controlled by the Cistercian Monastery of Byland, North Yorkshire. The evidence for this interpretation (other than its proximity to the fishpond) lay with the large amounts of lead objects identified as net weights. Deep ploughing on the site had revealed surface traces of a large hearth, thought by McDonnell not to have been for 'Monastic fishermen to dry themselves', but as an integral part of a 'fish-curing installation' or 'smoke house' (op cit, 30).

The excavations were directed by the writer for the University of York Archaeological Society and had three main purposes.

- (a) to substantiate and elaborate McDonnell's thesis,
 - (b) to collect and publish fully all material from the site and
 - (c) to rescue the remains of the building before total destruction through subsoiling and deep ploughing.
- (a) has been achieved in part, (b) is in preparation and (c) was fully completed.

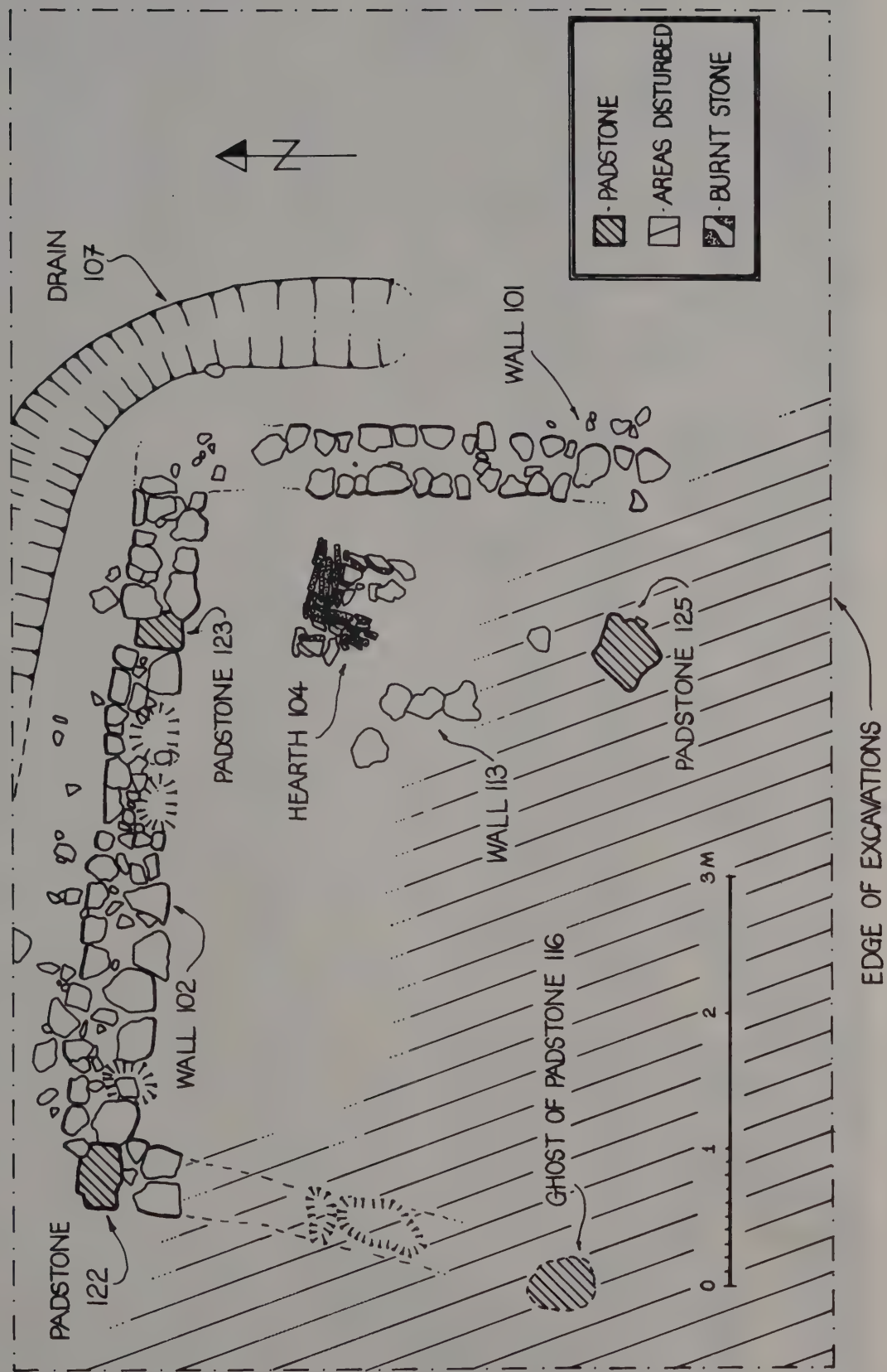
The site is at NG Ref. SE 532793 and is located in the Coxwold-Gilling Gap, a small trough-faulted valley within the shadow of the North York Moors (Fig 1B). The 'fishery hut' was on a terrace dug into the south-facing slope, commanding an excellent view of the pond.

Historical work by McDonnell isolates the main period of use of the fishpond as to between 1245 and the fourteenth century (op. cit, 24-7). The evidence of the pottery from the site reflects this almost exactly.

Finds and records are to be deposited in the Ryedale Museum of Rural Life, Hutton-le-Hole, York.

FIG 2

TRENCH 1 : PLAN OF STRUCTURE ONE





All trenches in view along transect looking south. Scales are 2m in 20cms divisions. Trench one in foreground showing the hut at fullest extent. The two parallel lines across the trench are subsoiler teeth marks.

EXCAVATIONS

An area 10m x 6m was opened to examine the 'fishery hut' (Trench one Figs. 1C and 2; Plate I). Beneath the clay topsoil were drystone walls and a hearth along with some stratified layers. The southern half of the site had been badly damaged by agricultural processes. The foundations of the northern wall (102) stood only 2 courses high, it was 50cms wide and made up of sandstone boulders. This joined padstones (122) and (123) (both re-used architectural fragments). Two corresponding padstones (116) and (125) on the south side led to the conclusion that the building had been timber framed with sill walls. An eastern annexe to this core was uncovered and this housed the hearth (104). The annexe was not a later addition but may have been set aside in this way to minimise any fire risk. Wall (113) divided the hearth area from the main body of the building, this area may have acted as a 'smoking cupboard' and in view of the separation of this area from the main building this seems a reasonable interpretation.

To the west a ditch (107) took surface water from behind the structure into the fishpond; the roof of the building was in tile and no floor levels were recovered inside it.

Three 1m square trenches were dug along the line of a transect through the valley (see Fig 1C, Plate I). Trench two revealed a hardstanding of rounded pebbles terraces into the hillside about 5m south of the 'fishery hut', this may have been on the lake edge and used for hauling up boats or unpicking nets etc. Trench 4 revealed nothing but boulder clay to a depth of at least 1m 80, whilst trench 3, at the lowest point in the valley revealed deep black organic deposits with hazel nuts and an alder branch amongst a wealth of environmental data yet to be examined.

FINDS

Lead

The most prolific class of finds from the site was the lead artefacts. There were 118 pieces weighing a total of 10½kgs or 23lbs. Amongst this number were 45 lead net weights presented in tabular form in Fig. 3. These weights fall into one of two types. Type one were interpreted by McDonnell as belonging to seine nets (op. cit., 30). They are heavier than the type two weights although a glance at Fig. 3 shows no clear division; type one weights can further be divided into type 1(a) cylindrical weights which would remain fixed on the net (Fig. 3/1a), and 1(b) doughnut shaped weights which had joins and could be clamped on and removed from the net when necessary (Fig 3/1b).

Type 2 weights were the so-called 'Swiss Roll' weights. These are rolled sheets of lead that range in weight from 60g down to c. 12g. In the case of smaller examples these must have been used on hand nets, whereas at the upper end of the

FIG
3

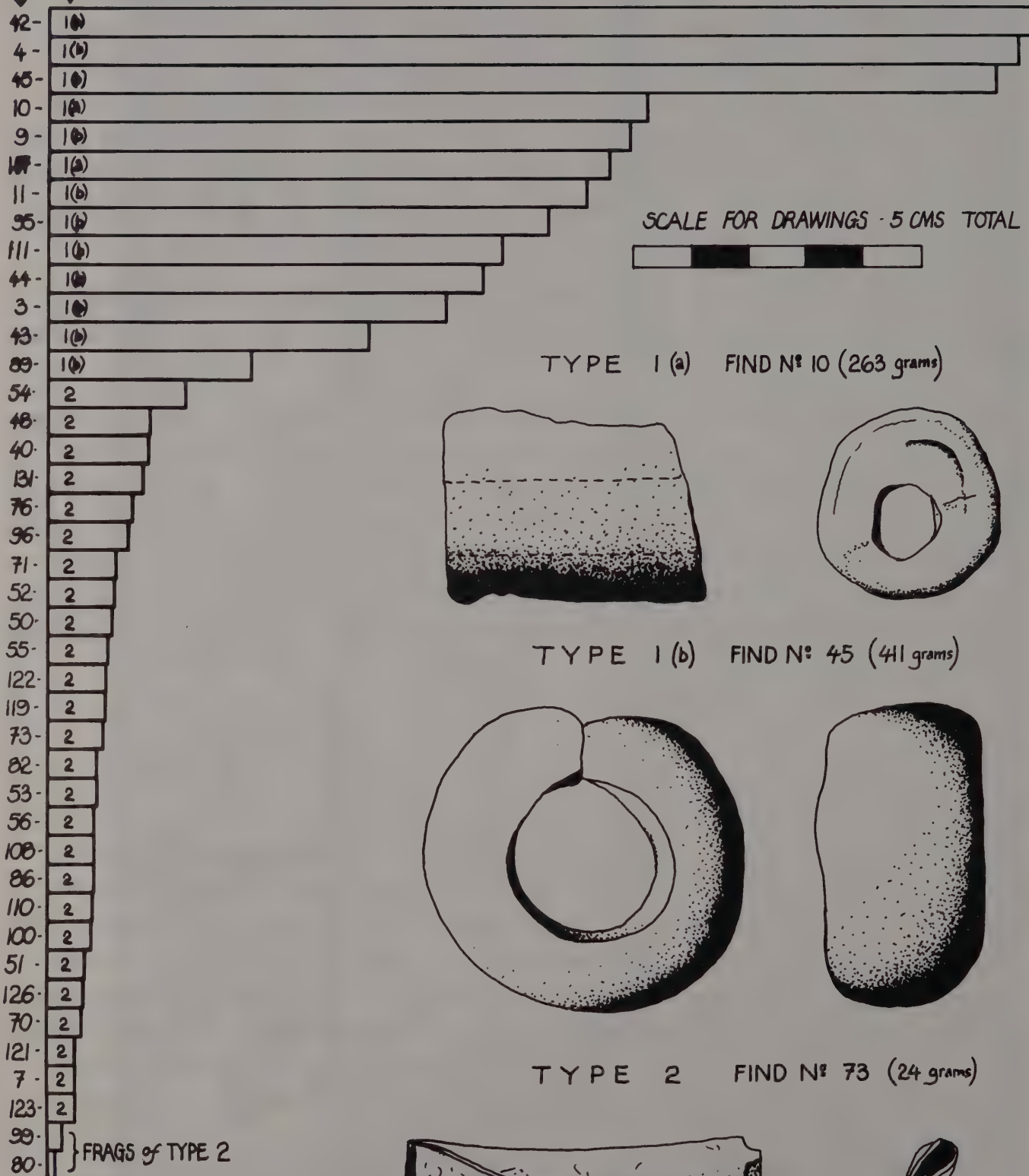
OLDSTEAD GRANGE

NET WEIGHTS ORDERED BY WEIGHT

WEIGHT IN GRAMS



FIND TYPE



scale there is nearly an overlap with type 1(a) weights, and use of type 2 weights on seine nets can also be envisaged.

The most interesting find from the site was a very carefully calibrated 7lb measure (Fig. 4). This was a large lead block cast in a sand mould with an iron ring in the top. After moulding the weight was trimmed, first using a 24mm chisel, followed by a much finer 2.5mm chisel. The final weight (as weighed) was 3154 grams or 6lb 14½oz, and in view of the loss of part of the iron ring, a 7lb measure is envisaged. The object was found by metal detectors in 1980, but it is certain that it comes from the immediate area of the building. In view of the fine calibration of this object, the idea that it may have been a mooring should be rejected and the possibility of accurate book-keeping, perhaps even ex-monastic trading of fish might be considered.

Many pieces of scrap, such as window lead, water pipes and masonry plugs, point towards a heavy demand for salvaged scrap lead and indeed to the melting and shaping of lead at the site.

Pottery

Several hundred sherds, both stratified and unstratified were found and are being analysed for the final report. Space permits only the briefest reference to this important class of material. Quite a number of vessels and jugs of Brandsby-type were represented in the assemblage and these are dated by Le Patourel to the late 13th to early 14th centuries. (inf. Cathy Brooks). This confirms McDonnell's dating of the pond remarkably well (op. cit, 24-7).

As well as jugs, two liquid storage vessels with bung-holes were amongst the sherds found - this might point towards pickling and storage of fish at the site, although all the pottery could relate solely to the workforce's needs.

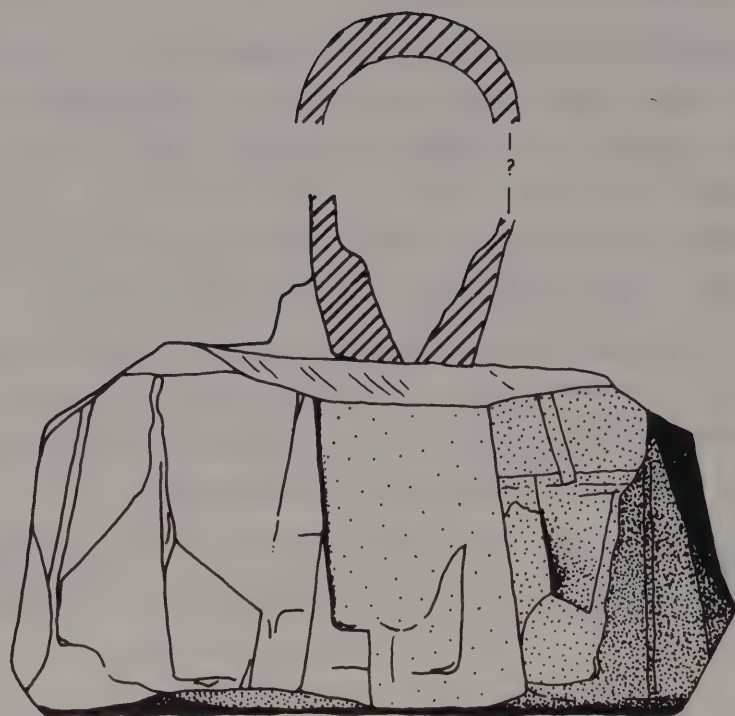
Other Finds

Two small iron knives were found and two door studs point to a lockable building. No bone material was uncovered probably due to the high pH of the soil. A sandstone slab with incised parallel lines may have been a game, tally or chart although this is far from clear.

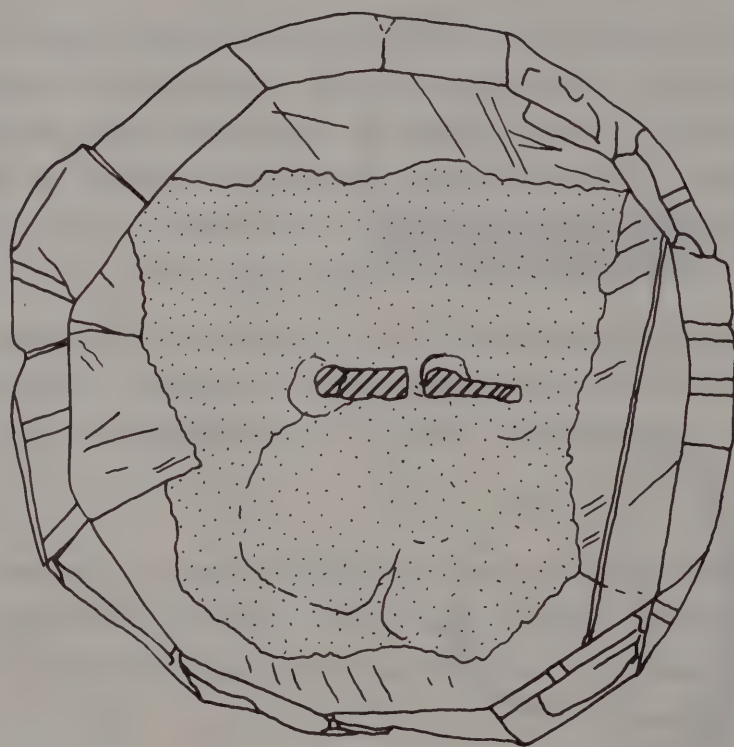
CONCLUSION

It is difficult to refute the suggestion that this structure was indeed a fish-processing establishment and a centre for the exploitation of this prized resource. The commanding view over the bulk of the fishpond from the fishery building points perhaps to a 'game-keeper' function in addition to net store/workshop, fish drying, smoking or curing establishment and perhaps, if the 7lb measure

FIG
4



- IRON

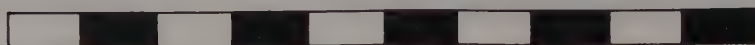


STIPPLE ON LOWER
DRAWING INDICATES
IMPRESSION OF SAND



3,154 g (6lb 14½ ozs)

OLDSTEAD GRANGE
716 MEASURE (LEAD)



CMS

is accepted, point of sale too. McDonnell's historical dates are accurately reflected by the archaeological ones, although two fragments of Cistercian ware (16th century) may point to a longer life than the 14th century. Further work on the environmental samples from the pond silts may shed further light on fish species kept and information about the flora and fauna of the area, but there is still a very great need for the ground-work of Messrs. McDonnell and Banks to be extended to other areas.

Bibliography

McDonnell J. 1981, Inland Fisheries in North Yorkshire 1066-1300, Borthwick papers No. 60, York.

O C C A S I O N A L N O T E S

Axe Find: South of Beadlam Grange, SE 641839 - 170 ft. OD.

Polished neolithic axe, greenstone, possibly Langdale or Borrowdale Ash. 14cm by 6.5cm nr. blade. 2-3cm thick. Found by J. Wood, Cross Farm, Harome. Cf. broken butt end of a very similar though smaller polished axe in greenstone, now in Malton Museum, found at Beadlam Grange about 1900; ref. History of Helmsley, Rievaulx and District (1963), p. 342. R.H. Hayes

A Siege of Helmsley Castle: The History of Helmsley in its references to the Castle, mentions only the Civil War of 1644 (p.155-6). It had, however, had its baptism of fire in 1216, soon after Robert de Ros rebuilt it (History, p 86). Robert was one of the leading rebels in the North, and though Scarborough and Pickering Castles were held for King John, Helmsley was successfully defended for de Ros. See Matthew Paris, and J.C. Holt, The Northerners: a study in the reign of King John, Oxford 1961, p.134. J. McDonnell

PREHISTORIC AND ROMAN ARCHAEOLOGY OF NORTH-EAST YORKSHIRE

ed. D.A. Spratt BAR British Series 104, Oxford, 1982

This book will be authoritative for a long time, both as a compendium of data on the prehistory of the area and as a stimulus to further investigation or interpretation. The editors state their purpose clearly at the beginning of the book:

"to provide the maximum amount of data on the prehistory of the area and then to construct what appears to be the most acceptable series of self-consistent explanations of this archaeological record in terms of the palaeo-environment"

They succeed in giving an orderly exposition, planned with informative distribution figures and a series of precise tables of locations of sites discussed.

The background to the prehistory of the area is first set out in two chapters, one on the Geology and Topography and one on the Palaeo-Environment. In each of these, selected, relevant information is clearly presented. Tables accompanying each chapter provide summaries of the ample material discussed in the text. This is not a book to read quickly and the two opening chapters set the tone. The material may be demanding but never dull. The writers' enthusiasm carries the reader.

The following chapters - five in all - collect detailed information about the prehistory of the area - up to and including Roman times - discussed in the usually accepted divisions of the cultures. It is, however, pleasing to note that the authors stress the difficulty of differentiating these cultures:

"the extent of overlap (of the late Mesolithic) with the early Mesolithic and with the Neolithic may be considerable".

This caution is repeated in the next chapter also:

"... the aggregation/dispersion pattern of the Mesolithic culture continued in its entirety ... into the early Neolithic period."

Data are closely related to locality and studied in their distribution over the whole area with the topographical information set out in numerous tables at the end of the book. Confidence in the information is strengthened by the evidence of detailed knowledge of the area and of the artifacts discussed, as well as by the Bibliography appended to the chapters. As the dates of the numerous works cited range from 1808 to 1981, the lists are a valuable source of reference.

The book is not just an encyclopedia. Each chapter considers the information and offers interpretations of its relationship to the life and conditions of the times. It is not necessary to agree with all the hypotheses offered but they

certainly add stimulus for further consideration. I note particularly the discussion of the cairn fields and of the linear dykes. Interpretation has certainly changed since Atkinson's early theories. The later chapters are equally stimulating and, typically, -the last six pages of the text are devoted "Research Suggestions", "Gaps in our knowledge" and "An unsolved problem"

As the authors are rightly aware, this book, invaluable to the local historian has importance for a much wider readership. They stress throughout not only the unusual richness of the remains in North East Yorkshire but their significance in a wider context, occurring as they do, in a transitional zone between the lowlands of East England and the Northern Highlands, as well as between the lost areas now under the North Sea and the surviving areas of dry land. As G.W. Dimbleby has said (quoted p.1) this is a 'Laboratory of Archaeology'.

Some minor criticisms must be made. As in other BAR publications that I have seen, there is no index - pity, in a work like this. Most of the maps show distribution well, but for locations, the user must look at the Tables at the end. The list of Figures at the beginning of the book does not give pages. Bindings and format make the book suitable for carrying in the car but not in the field where the six-figure references are most likely to be consulted.

Reviewing this book in short compass is difficult, so many and so varied are the trains of thought suggested to anyone familiar with the area or with the implications of the material in a wider context.

It is a pleasure to read and a stimulus to further action.

G T Morris

LEVISHAM MOOR: ARCHAEOLOGICAL INVESTIGATIONS, 1975-78

by Raymond Hayes (edited by Percival Turnbull).

A joint publication of the North York Moors National Park and the Scarborough Archaeological and Historical Society, 1983. A4 paperback, pp. 97. £3.75.

During the late nineteen-fifties and early sixties the Scarborough Archaeological and Historical Society partially excavated the banked enclosures and dykes which are conspicuously sited near the centre of Levisham Moor, finding them to belong to the last period of the Iron Age and the earliest part of the Roman occupation. Thereafter the Society became more involved in medieval archaeology, and it was left to the ever-conscientious Raymond Hayes twenty years later to gather the information together and produce the text and drawings for a publication, finally edited by Percival Turnbull. The work comprises a good air photograph of the moor as the front cover, a preface by Derek Statham, National Park Officer, an introduction and summary by the editor, a description of the geology of the moor, six chapters on the enclosure excavations, a list of pottery finds, appendices on the animal bones, the analyses of metallurgical slags (see separate note at the end of this review), pollen analyses from buried soils, observations and documentation on the medieval history, and catalogues of linear earthworks and round barrows. There follow 17 pages of plans and sections from the excavations and seven pages of drawings of pottery and other finds.

The publication ~~therefore~~ therefore comprises a landmark in the archaeology of Yorkshire, providing a complete account of our present knowledge of this most important area, a factual basis on which future work can firmly rest. The author allows the facts to speak for themselves, and, wisely no doubt at this stage, does not attempt an interpretation of them, for it is doubtful whether the sites can be fully understood when we have very little knowledge of what was happening on the nearby more fertile terrain in the vicinity of Levisham village, or of possible activity in the surrounding valleys. Some of these problems are hinted at in the editor's introduction. What was the economy at the Levisham Moor enclosures, and how did it relate to the general economy of the area? Why were they abandoned early in the Roman period? Why are the Levisham Moor enclosures almost unique on the Tabular Hills? (Studford Ring on Sproxton Moor, and Coomb Hill in Wykeham Forest seem to be the only surviving analogies.) These questions can only be answered speculatively at present, but as knowledge of the archaeology and ecology of the district grows, we shall have for reference this splendid factual basis for Levisham Moor. Of particular importance is the Iron Age bloomery discovered a short distance from the main enclosure. This is probably the most complete smelting works of the Iron Age ever discovered in England,

and is an important contribution to early metallurgy.

The text and drawings are carefully edited, but there seems to have been some lack of liaison in the preparation of the map, which is misleading in parts. In the north of the moor there are attached to the dykes enclosures which simply don't exist, and other dykes which are in fact hollow-ways. Horness Rigg archaeology is quite wrong; there are field banks across the Rigg, not lynchets, and a central north-south bank, giving a clearly defined field system; and the enclosure H is incorrect.

Nevertheless, the report overall is a cause for congratulation to the author, the editor and the sponsors. A formidable task for all concerned, and well done.

D.A. Spratt

A Review of the Iron-working Evidence, Levisham Moor

The evidence for Iron Age iron-working on Levisham Moor derives from two contexts: the furnaces and associated slag in Enclosure D, and the slag from Enclosure A (analysed in Appendix C). The latter is probably smithing slag, which means no correlation with ore sources can be made.

The important aspect of this report is the evidence of the furnaces, since they are well preserved and of Iron Age date. The author classifies the furnaces using the typology devised by Coghlan (1) and subsequently adapted by Cleere (2), but this typology is under review; the apparent dome/bell shape of the furnace illustrated in Fig. 16, moreover, probably results from the attack on the lower part of the clay structure by the liquid slag and its removal during the tapping or raking out of the furnace. A more satisfactory interpretation is that Furnace III (and probably I and II) was a shaft furnace similar to those from Ashwicken in Norfolk (3) and common in the Roman period. In that case Levisham places the use of the shaft furnace in the Iron Age, and is thus of great importance in discussions of the development of early iron-working technology in Britain. It is to be hoped that further technological study of the Levisham furnaces will be forthcoming.

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References:

- (1) Coghlan H.M., Prehistoric and Early Iron in the Old World, Pitt-Rivers Museum, 1956.
- (2) Cleere H., 'The Classification of Ironworking Furnaces', Antiquaries' Journal, 1982, pp. 8-23.
- (3) Tylecote R.F., Metallurgy in Archaeology, 1962, p 220.

POVERTY AND THE POOR LAW IN THE NORTH RIDING

By R.P. Hastings

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Economic and Social History has now passed the stage where easy generalisations can be made in text books. Nowhere is this more true than in the period known as the 'Industrial Revolution', 1780-1850. The 'revolution' in industry is now viewed in terms of a more long-drawn-out increase in economic growth and a gradual shift from the agricultural to the industrial sector. Far from replacing the primary with the secondary sector, agriculture and industry were closely inter-related in the period under review. Population growth allied to economic growth encouraged urbanisation with its promise of higher wages, its threat of unemployment in recession, the certainty of poor housing and conditions of life, and yet the wider opportunities that come from an urban environment. But whereas an older generation of historians encouraged the belief that agricultural change - and in particular the enclosure movement of the late eighteenth century - threw families off the land, the first synthesis of modern research concluded that agriculture required more, not less, labour until at least 1850. And since population increase put pressure on agriculture to produce food enough for both persons and cattle, such as horses for transport and the working of the land, the place of agriculture and the rural community in the economy 1780-1850 is now seen to have been more decisive than was once thought.

The dreaded evil in the economy was fluctuations. In particular the fluctuations in prices as a result of bad harvests. For the rural poor there was no escape from depression and no escape from poverty consequent upon such distress. The Elizabethan Poor Law of 1601 was amended in 1834 on the principle of 'less eligibility', in the belief of Edwin Chadwick and his team that rural poverty was the result of idleness rather than the result of circumstance. Poor Law history became part of that political and polemical battleground which has characterised all debate about living standards during the period of the 'industrial revolution'. Dr. Hastings' pamphlet is one of a number of regional studies which attempt to provide a factual basis to discussion which has for so long been dominated by ideology. Much of the responsibility for this in the case of the Poor Law was the nature of the evidence collected and collated by the Poor Law Commissioners, of whom only one apparently reported from the North Riding. A widely respected historian, Dr. Blaug, quoted by Dr. Hastings in his text, described Chadwick's Poor Law Report as 'wildly unstatistical' thus confirming Professor Tawney's earlier conclusion that it was 'brilliant, influential and

wildly unhistorical'. The merit of Dr. Hastings' researches into North Yorkshire under the unreformed Poor Law, is to show that the Elizabethan Law survived the test of time. It was profoundly adaptable and local parishes and officials used their imagination to find ways and means of coping with both long-term and short-term poor.

The North Riding of Yorkshire, however, was a relatively easy county to administer. Poverty was 'less acute' than elsewhere. On the whole wages were more stable, there was less unemployment, there was a smaller number of able-bodied poor than in other counties. The main problem was the sick and the aged, 'the impotent poor'. Not surprisingly there was some resentment at the fact and operation of the New Poor Law of 1834, but as elsewhere the county seems to have ignored its provisions and, so far as can be judged up to 1837, carried on with its poor law customs in a pragmatic way. But North Yorkshire was not entirely isolated from other rural counties: expenditure before the peak of the price rise in 1813 was determined by the level of food prices, and in 1812-13, 25% of Newburgh expenditure was on 'corn for the poor'; after 1813 during the long price fall the causes of poverty were more likely to be unemployment and low wages, less severe in a northern rural than a southern rural county. Indeed, per capita spending was among the least of all the counties of England and Wales. But money alone was not sufficient indication of concern for the poor. The Act of 1601 made no provision for the sick, yet 'by 1834 the occasional payment of doctor's bills had grown into an embryonic service for the poor'. At Kirkbymoorside, a lame pauper's expenses at the County Hospital were paid for a month. Provision of work rather than cash was always preferable and the 'universal task of the hard-core unemployed and the seasonally unemployed in winter, was road repair'. But there was still the work-house, and in the North Riding in the late eighteenth century, there were 35 such establishments with 964 inmates, though it should be said, as Dr. Hastings emphasises, that only Whitby, Scarborough and Malton were large formal institutions. The work-house at Guisborough was no more than an 'old tumbledown cottage', and that at Helmsley housed only 20 poor. The evidence Dr. Hastings has brought together on the North Riding workhouses is the most interesting part of his research: conditions in general were 'not harsh' though, inevitably, there were exceptions, and the standards of discipline would not find favour today. At Easingwold 'talking was forbidden at meals and men and women sat apart'. Liquor was banned at Scarborough, but it is evident that institutional life, then as now, was able to burst through such regulations for we are told that 'drunkenness ... brought a day's solitary confinement'. The harshest measures were reserved for the situations created by population mobility, and it is here that the North Riding was perhaps less just in its operation of the Poor Law. 'Settlement laws could bring injustice and hardship'; there was a 'high incidence of

removals' in difficult periods of depression. Settlement law could break up families, and Dr. Hastings suggests that in North Yorkshire poverty and lack of family security went together: 'The period from 1772 to 1811 saw a massive increase in illegitimacy. By 1842 the North Riding had the sixth highest illegitimacy rate in all English counties.'

This pamphlet is brief, economical in style, wisely avoiding the danger of padding. It has another merit, and one which is increasingly important in economic and social history. It is of a length and style and concerned with a topic of interest to 'A' level students. So much of historical research is of no use to the young student until it has been distilled down into text-book form. Dr. Hastings might find encouragement in the fact that this pamphlet serves as an ideal week's teaching to an 'A' level set on the subject of the old poor law in a particular area of the country. It comes down to detail simply and directly without getting bogged down in complexities. Text books can provide generalisations; this sort of study provides the teacher with his evidence, without the polemic of an E.P. Thompson or an Edwin Chadwick.

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BUILDING CRAFTSMEN IN LATE MEDIEVAL YORK

By Heather Swanson

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It is, to this unreflecting reviewer, amazing what a rich quarry York is turning out to be for the historian, from darkest times to the present. The presence of a university there from the 1960s, with its need to feed subjects to would-be researchers, has clearly added much to the production of historical works; but the existence of a mass of evidence, archaeological, administrative and ecclesiastical, in the Church Province and ancient northern capital city is the *raison d'être* of so much fascinating history. And, that being so, York has not neglected her libraries and her learned societies down the years; and citizens have not been slow to contribute their funds to their propagation. The Borthwick Institute, which gives its name to this series of pamphlet studies, is one such body.

Let us dwell a moment on some of the 63 Borthwick Papers to date, with our eye on history written from a York provenance, or at least covering the Ridings of Yorkshire. The Church sources have, inevitably, attracted the most study, covering such subjects as the last four Anglo-Saxon archbishops, Yorkshire nunneries in the high middle ages, Archbishops Plantagenet and Melton and their struggles, late middle ages diocesan administration, the Reformation, episcopal estates during the Civil War, the Church courts, Church music, Convocation of York, the Oxford Movement, etc. Other subjects of study embrace law and land holding, education and literacy, reform politics, medieval massacres, epidemics and famines, Poor Laws and strikes, fisheries, and more besides. In all, a feast of ecclesiastical and civic living across the centuries from AD 71 to 1971.

In the light of that, Mrs. Swanson's thesis, supervised by the fine medievalist Professor Barrie Dobson (who himself writes distinguished Borthwick Papers), falls into the expected. This mighty capital of the north, this home of dissent from London rule, this harbour of the most huge of all medieval cathedrals and many churches besides, this proud civic centre and abode of the guilds, has been much abuilding down the medieval years- before trains transformed it. And the river too has needed to be several times bridged and its banks steadily shored up. Much was the need of the craftsmen.

Mrs. Swanson has calculated the admissions to freedom of the City of building craftsmen in the period 1300-1534 (before which there were virtually none). She counts 350 carpenters, 100 sawers, 50 cartwrights and as many carvers, over 40

joiners and as many turners, and nearly 40 shipwrights. She counts 215 plasterers and tilers, 155 masons, 80 glaziers and as many labourers, 60 plumbers; and others that bring her total to 1337. It is all set out in her 1980 unpublished D.Phil thesis from York, 'Craftsmen and industry in late medieval York' (408p), from which this study is culled. When I read about the wealth of both civic and personal records relating to the lives of building craftsmen; and how most valuable among it all have proved to be the surviving wills of building craftsmen, I remember old forms of literary history and let a chill shudder down my frame at the thought of the toil of modern historians, especially the socio-economic. But it was her choice to labour as hard as those craftsmen, and to discover that they fall into six main groups: masons; carpenters and associated crafts; plasterers and tilers; glaziers; plumbers; and pavers and labourers. Hers was the choice to delineate in her period a golden age with a rapid expansion during 1350-1450 involving mercantile prosperity resting on the wool trade and export of woollen clothing or cloth; and then an equally rapid and inexorable contraction and near collapse in the subsequent century from about 1460: 'By 1534 the contrast with the early years of the fifteenth century could hardly have been greater'.

So we set out along this story with all these craftsmen, first to build that huge Minster which was concluded only in 1473; then to build endless parish churches (eight new ones in the last century before the Reformation); then to build the friaries, the great St. Mary's Abbey, and the great St. Leonard's Hospital. Phew! 'In comparison to this huge quantity of masonry erected by the Church, civic building in stone was largely restricted to the City walls and the Guildhall'. Yes, but have you seen those City walls with their Bars and barbicans? By 1315 those walls were complete save for the Old Baile and the Walmgate area: but a lot more fortification went on in subsequent centuries to toughen the edifice

Then think of the Halls - the Guildhall, the Common Hall, the Merchant Adventurer's Hall, St. Anthony's Hall, the Merchant Taylor's Hall, and so on. Then think of those endless living dwellings along well appointed streets, all set out in this period. There seems to have been time only to defend, to pray and to build - and one recalls Alfred's division of men into bellatores, oratores et laboratores.

As you might expect, the author has discovered that the place to be if you were a builder from the north (and it was well before the great fire of London) was in York; that the earlier ones had an increasingly fat time and the later ones an increasingly lean time; and that, while there were a few glorious building careers (not quite on the scale of Sir Edwin Lutyens or Sir Robert McAlpine, but enough to leave glowing records of satisfaction for selves and clients), for the main and for most of the period the builders' calling was outdoor and

so wet, and hard going for the cash. For some, such as the glaziers, who could lead Europe in aesthetic design, life was fulfilling; but for the most part it was 'a constant round of repairing doors, windows, roofs and pavements' for the builders, who found themselves - even in the dazzling architectural glories of York - 'among the poorest of urban craftsmen'. It is always the same: except for the favoured few, life is sad and very tough. But then, until recently, historians took care only to speak of the successful and the satisfied.

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